

## **CITIZENS PARTY**

### **Response to *Consultation Paper on Managing Indoor Air Quality***

Citizens Party is pleased that the Government has finally produced the consultation paper on indoor air quality. Indoor air quality (IAQ) is a long neglected area and the current lack of regulation is clearly damaging our health.

We endorse much of what is in the *Managing Indoor Air Quality Consultation Paper* and the *Guidance Notes for the Management of Indoor Air Quality in Offices and Public Places*. However, while we support these initial first steps, we believe that a sustained and determined effort still needs to be made to implement the proposals expeditiously.

We have the following observations and recommendations:

#### **1. Legislation is the final goal, not an option to be considered in future**

The Government proposes voluntary measures until 2003 and will only then begin a review to see if legislation is required.

Ironically, the Government deems lift and escalator safety critical enough to have enacted the Lift and Escalator Safety Ordinance. Yet despite the IAQ proposal's own statement that exposure to some indoor pollutants can increase "risk of life threatening illnesses, such as lung cancer (item 6)" the Government evidently does not deem the health of Hong Kong people important enough to immediately begin working toward legislative safeguards.

Drafting legislation is complicated and takes time but it should be the goal since voluntary schemes do not usually work well. We recommend that the Government kick in the proposed Phase I within 2000, and be ready to legislate by 2003.

We present a revised Table 3 as follows:

**Revised Schedule for the Implementation of the IAQ Management Programme:**

<b>Timing</b>	<b>Implementation Elements</b>
<i>Phase I:</i> 1/2000 – 6/2001	<ul style="list-style-type: none"> <li>• Launch <i>Public Education and Publicity Campaign</i></li> <li>• Establish <i>IAQ Information Centre</i></li> <li>• Survey <i>Trial Sampling of Government Buildings</i> and bring to Level 2 Compliance</li> <li>• Offer <i>Financial Incentives to Private Sector</i> to meet Level 2 compliance before legislation is enacted</li> </ul>
<i>Phase II:</i> 7/2001 – 12/2001	<ul style="list-style-type: none"> <li>• Begin drafting <i>IAQ White Bill</i> using results garnered from Phase I</li> </ul>
<i>Phase III:</i> 1/2002 – 9/2002	<ul style="list-style-type: none"> <li>• Publicize <i>IAQ White Bill</i> for public consultation</li> <li>• Assess public response</li> </ul>
<i>Phase IV:</i> 10/2002 – 7/2003	<ul style="list-style-type: none"> <li>• Gazette <i>IAQ Bill</i></li> <li>• Passage in the Legislative Council before 7/2003</li> </ul>

## **2. Create a Task Force**

The presence of air pollutants is ubiquitous and involves many layers of society. Although the proposed Inter-Departmental Indoor Air Quality Management Group (Annex A) is large, it still does not include many groups that will need to cooperate for concomitant action.

To be effective, a lean *IAQ Task Force* is needed to consult with the stakeholders and the IAQ Management Group, who will then convert the IAQ proposals from a technical paper into a strategic action plan.

While not exhaustive, stakeholders who should be included are:

### Academic Component

Specific Aim: *the Science of IAQ*

1. Aero-biological Engineering
2. Environmental Medicine

3. Certification and training: IAQ consultants and service providers
4. Research and Development: Environmental technologies for local problems

#### Governmental Component

Specific Aim: *the Legislation of IAQ*

1. ASD (building architects)
2. EPD (environmental protection): air policy
3. PLEB (environmental planning)
4. DOH (health planning)
5. Legislative Council (EA panel members)

#### Non-Government Component

Specific Aim: *the Business of IAQ*

1. CET/HKBEAM: HKBEAM building codes
2. HK Productivity Council: IAQ consultation
3. Hong Kong Institute of Architects, American Institute of Architects (HK branch): Architect consultation
4. Business Coalition for the Environment and Private Business Sector for the Environment: project-base supports
5. Building materials suppliers

#### IAQ Action Groups Component

Specific Aim: *the Public Relations and Consumer Advocacy of IAQ*

1. Advisory Council on the Environment
2. Consumer Council
3. Users groups

The list may seem unwieldy but the stakeholders could be united by the efforts of a core Task Force.

### **3. Beware of self-regulation to avoid abuse**

Under the proposed approach of self-regulation, building owners will need to employ suitably qualified personnel to assess the indoor air quality of their premises against the IAQOs, and put up a certificate to indicate the level of compliance.

Building owners should pay for their own IAQ monitoring, but asking them to search out and employ their own monitors is inviting abuse. It is like asking a fox to guard a hen house.

To assure consistency in air quality evaluation, we recommend that the IAQ Task Force assemble an approved list of qualified engineer-monitors which building owners can then employ. We suggest a review of the effectiveness of the current lift and escalator certification system to see how such a system might operate effectively.

#### **4. Develop an incentive system**

The currently proposed Phase 2 (Invitation of private sector buildings to voluntarily participate in the IAQ certification programme) will waste valuable time. “Winning a certificate” is inadequate incentive for building owners to pay the costs of IAQ monitoring and modified work environments to meet compliance. It is problematic enough today to get owners to maintain basic fire and safety standards, let alone voluntary IAQs. If buildings do not meet IAQs there will be even less incentive to display certificates.

A more reasonable stimulus may be to offer financial incentives to companies (e.g. developers and building management companies) voluntarily complying by the time of legislation. Such incentives might include offering partial tax credits to owners/managers who need to undertake improvements to their systems to reach compliance.

We support the proposal to reward voluntary IAQ upgrading with certificate display. We will go further. We recommend that during the initial voluntary trial period, buildings and their owners that meet compliance should be periodically listed in Hong Kong’s most widely read newspapers, with publicly announced awards granted at year’s end for those buildings that:

- 1) Attain Level 1 ratings; and
- 2) Make the greatest leap in air quality improvement.

Once IAQ is legislated, similar to the way lift and escalator maintenance is controlled, enforcement should include posting a notice in a public location with a listed inquiry hotline so that building occupants can contact an appropriate investigative authority should they have questions regarding building compliance.

## **5. Require systematic, comprehensive monitoring**

It is not clear how the monitoring will be done – whether it will be done on each floor or unit of a building, only in public areas, etc. Since the IAQ can vary tremendously in different parts of a building, even within the same floor of a building, there needs to be general guidance on how many measurements will be required.

For example, ventilation systems for an entire building may be generally sufficient, but one tenant of the building may register dangerously high formaldehyde levels due to the materials used to fit out its office while another may register abnormally high TVOC levels. The Task Force should consider the need to display a master certificate with a tenant directory in the building lobby and the corresponding registered compliance of each tenant on the directory. This would enable a concerned occupant to discretely check his or her own firm's IAQ compliance.

## **6. Develop a Hong Kong Carcinogens and Chemical Health Hazard Registry for all Indoor Building Materials and Consumer Products**

Even if architects and building professionals are educated to specify safer (i.e. Zero VOC, formaldehyde-free) materials, in the absence of a standardized product rating system, they will not have the information necessary to make responsible choices. Therefore, a goal of the IAQ Task Force should include:

- 1) Developing a standardized IAQ labeling system for Hong Kong, and
- 2) Establishing a set of Compliance Codes for contractors and retailers.

## **7. Involve the Hong Kong Health System**

The costs of operating an IAQ Task force, improving IAQ systems, labeling products and coordinating educational programs for relevant professionals and the general public are meager when compared to the costs incurred in health care, lost worker productivity, sick days taken, doctor's visits, medical treatment and curtailed life spans resulting from exposure to indoor air toxicants.

A critical oversight of the EPD proposal is the need to pursue a medical system for diagnosis and treatment of disease created by indoor air pollutants. The EPD needs to work with the DOH to take the lead in the introduction of environmental medicine in Hong Kong.

In addition to the skin, the upper airway—including the nose, paranasal sinuses, pharynx, hypopharynx and larynx—is the first site of impact for air pollutants. Although these organs occupy a vanguard position in the respiratory system, their response to irritant vapors, dust, smoke, and fumes receives scant attention in the medical literature.<sup>1</sup> Not surprisingly, then, physicians lack sufficient information to properly assess the role of occupational or environmental exposure in the genesis of upper airway symptoms. A similar deficiency in the local medical professionals can be observed in treating the pollutant-related illnesses. Therefore the EPD and DOH need to work together to establish a mechanism to educate physicians on IAQ-related symptoms and treatment in Hong Kong.

#### **8. Eliminate Environmental Tobacco Smoke (ETS)**

We fully support the Council on Smoking and Health in its fight against ETS-contaminated work places.<sup>2</sup> There is no reason why non-smokers must suffer the health effects inflicted on them through passive smoking. The goal of the IAQ task force should be to ensure a standard level of healthy air for all those who purposely choose to avoid the negative health risks involved with smoking. While negatively pressured smoking lounges mentioned in 4.8 of the *Guidance Notes* may be viable for newer structures, older buildings that cannot afford smoke-contained lounges should ban smoking in their buildings altogether. We wish to emphasize that ETS is one pollutant that can be removed by simply banning smoking in all work places.

#### **9. Level 3 air quality is unacceptable - Level 2 should be the *minimum***

What is the purpose of expending time and resources to improve indoor air quality when we are permitting building owners to get away with third-rate air quality? The bold-face suggestion that owners and managers of office buildings and public places “should endeavour to achieve at least Level 2 of Indoor Air Quality Objectives” (item 24) is tantamount to informing airline pilots that a bumpy landing is “good enough.” It makes more sense to require pilots to test for skills necessary for smooth landings. If the Government is going to improve IAQ, then it should be committed to doing so.

The Government's study has found high levels of dissatisfaction with indoor air quality by occupants surveyed, and a high proportion of buildings classified as 'sick'. Certain public places, including restaurants, cinemas and shopping malls were found to have levels of certain pollutants higher than recommended standards.

In view of the public health implications of these findings, we are therefore surprised that the Government chooses to take a very passive approach to dealing with the problem. The Government must make up for lost time and "put teeth" into its effort and address the health risks arising from IAQ as a matter of urgency.

31/12/1999

Acknowledgment:

Sai C. Chan, MD, Ph.D., Managing Director of Environmental Care and Professor of Medicine, Associate Dean for Clinical research, OHSU, Portland, Oregon

Footnote:

<sup>1</sup> Open letter to Alain Lam, Air Policy Group, EDP from AJ Hedley, COSH, "Consultation on Managing Indoor Air Quality: The Guidelines derived from the Governments Consultancy Study on Indoor Air Pollution in Offices and Public Places 1995," 10 September 1999