Legislative Council Panel on Health Services

Findings of Technical Feasibility Study on Smoking Rooms
Supplementary Information - Consultants' Observations on
Two Model Smoking Rooms of the Private Sector

Purpose

This paper summarizes the observations of the consultants commissioned by the Food and Health Bureau (FHB) to conduct the technical feasibility of smoking rooms at their visit to two model smoking rooms constructed by the private sector[1].

Background

2. At the invitation of the Hon Tommy Cheung, Chairman of the Food Business Taskforce (the Taskforce) under the Financial Secretary's Business Facilitation Advisory Committee, the consultant team from the Electrical and Mechanical Services Department and the University of Science and Technology conducting the technical feasibility study on smoking rooms for FHB participated in a visit to two smoking rooms on 11 November 2008 together with Taskforce members and FHB. The two smoking rooms are at the premises of a tobacco company in Chai Wan and a bar in Causeway Bay respectively.

3. At the Health Services Panel meeting on 20 April 2009, the Under Secretary for Food and Health (USFH) briefed members on the findings of the technical feasibility study on smoking rooms. In response to the Hon Audrey Eu's request, the Administration confirmed that FHB staff and the consultants had visited two smoking rooms set up by the private sector with a view to gaining information on their set up and effectiveness in preventing ETS leakage, and undertook to provide a summary report of the consultants' visit. Neither FHB nor the consultants have received any documented feasibility study reports on either of the smoking rooms both before and after the visit. The following is therefore a summary of the consultants' observations during the visit and do not represent any considered assessment on the feasibility of the two smoking rooms.

[1] The consultants have cautioned that, since detail measured technical data regarding the design, construction and operation of the smoking rooms in question were not provided, and that no controlled scientific measurements could be carried out in the environment in question, the observations should be taken as such and should not be regarded as representing any scientific research by the consultants.

Visit to an Air Ventilation Show Room of a Tobacco Company

4. The 20m^2 room was equipped with a displacement ventilation system and an interlocking double door design. During normal operation, the room was claimed to be maintained at -5 Pa at exhaust and supply airflow rates of 555 l/s and 500 l/s (25 l/s/person) respectively. The company conducted an experiment with smoke pellet (composition unknown) and occupants going in and out of the room, with measure of respirable suspended particulate (RSP). Test report from the company revealed that the (RSP) level outside the double door increased from background level (about 55 μg/m^3) to about 180 μg/m^3 during this span. The increase in reading may be attributed to the leakage through the door gaps and/or by occupants' movement. Smell was detected by some visitors staying outside the room even though the double doors were closed. The smell was strong when the occupants left the room while the experiment was still running and this smell persisted until the end of the experiment.

Visit to a Smoking Room within a Bar

5. The 10m^2 room was equipped with double doors without interlocking devices. Air was exhausted at 670 l/s from the ceiling and the bench level and the make-up air was drawn from the outdoor through a 2.5 HP ceiling-mounted air conditioner (200 l/s) and from the corridor area outside the room. A few cigarettes were smoked within the room for about 15 minutes. Initially, the double doors were closed and there seemed to be no detectable smell outside the room. Then both doors were opened and one of the smokers smoking inside the room blew the smoke towards the corridor to demonstrate the potential leakage during an extreme scenario. Smell was detected by a few visitors outside the room but not all, reflecting the different level of olfactory sensitivity of the visitors. No measurement had been carried out on any tracers of environmental tobacco smoke.

Conclusion

6. The observations were made during relatively short durations and under low accumulated emission (i.e. small amount of smoke pellets were burnt in the first visit and small number of cigarettes were smoked in the second visit). Also, measured data for emission of environmental tobacco smoke (ETS) and other materials were not available. In addition, the absorption and subsequent release of the ETS constituents by the clothing of the occupants and wall finishes/furniture inside the smoking rooms

had also not been assessed. More thorough scientific studies would be required if it were considered necessary to assess the leakage level of ETS, suspended particles, as well as odor to the environment outside the smoking rooms.

7. It should however be noted that the model smoking room built by the consultants in its feasibility study for FHB has employed more stringent technical and design standards than these two smoking rooms visited in terms of its ventilation system and double door design, as well as the surface materials used for all internal walls, ceiling and floor. As reported to the Health Services Panel on 20 April, it was found after repeated experiments that leakage of ETS cannot be prevented even with such stringent design and ventilation standards as long as there is human movement in and out of the room. So far, none of the evidence gathered from the experiments and visits conducted by the consultants or researches or experience from overseas suggest that smoking rooms are effective in preventing leaking of environmental tobacco smoke. The Administration remains of the view that there is as yet no conclusive evidence to substantiate the effectiveness of smoking room in separating smokers and non-smokers and protecting non-smokers outside the room from exposure to second-hand smoke.

8. The findings so far are in accord with the World Health Organisation's advice that "*ventilation and separate smoking rooms do not reduce exposure to second-hand smoke to an acceptable level or safe level'*. Having regard to the findings of the technical feasibility study, our research of overseas experience on smoking rooms, and taking into account factors including local physical constraints (including limited space for building viable smoking rooms with up- to- standard ventilation system, constraints of building structure and environment over ventilation system design and capacity, and other building regulations and restrictions) on the installation and operation of smoking rooms, the impact of smoking room on the fair competition between different trades and between large and small enterprises within a trade, and the fact that venue managers do not currently assume legal liability over violation of indoor smoking ban, we do not consider smoking rooms are feasible in Hong Kong and would not pursue any further studies on smoking room at this juncture.

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