Handling of Seepage Complaints in Buildings by Water Supplies Department

Background on the Handling of Seepage Complaints in Buildings

- 1. Complaints of seepage at the ceilings in buildings may arise from one or more of the following common causes: -
 - (i) Leakage in drainage or waste water pipes of upper/adjacent flats;
 - (ii) Leakage in water supply pipes (that is termed as inside service in Waterworks Ordinance) of upper/adjacent flats;
 - (iii) Seepage of water through external wall;
 - (iv) Defective waterproofing in various elements of a building (e.g. of drain sumps, floor slabs, seals around bath tubs or sinks, etc).
- 2. Various building defects contributing to seepage in buildings can be actionable under: -
 - (i) The Public Health & Municipal Services Ordinance by the Food and Environmental Hygiene Department (FEHD);
 - (ii) the Building Ordinance by the Buildings Department (BD); and
 - (iii) the Waterworks Ordinance by the Water Supplies Department (WSD).

As a result, water seepage complaints in buildings are principally handled by the three Government departments named above.

Inter-departmental Procedures in Handling Water Seepage Complaints

3. An inter-departmental working group among the 3 departments introduced an agreed set of procedures in April 1998 to deal with seepage complaints. Under this agreed procedure, all seepage complaints are in the first instance directed to FEHD for their initial investigation because based on past experience, most of the complaints are not related to water supply pipes or building structure. On receipt of a complaint, FEHD staff will carry out visual inspection and dye tests on site. For cases suspected to be relating to defective water supply pipes or other building defects, FEHD will refer the case to WSD or BD for investigation action under the Waterworks Ordinance or the Buildings Ordinance as appropriate.

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WSD's Actions under the Waterworks Ordinance

- 4. For those complaint cases referred from FEHD, WSD will find out if leakage from water supply pipes is a possible cause by reviewing the consumption history of the flat. If the latest consumption figures show an abnormal increase (+10%) over the average consumption, site inspections and 'flow-checks' will be conducted to see if a significant leakage from the water supply pipe exists. In a 'flow-check' all draw-off points are turned off and the water meter is observed for at least 30 min. for any registration of consumption. Where leakage from the water supply pipes is positively identified, the case is actionable under the Waterworks Ordinance. WSD will issue a repair notice under the provision of section 16(1)(a) of the Waterworks Ordinance¹, requiring the consumer to carry out repair work to stop the leakage.
- 5. If the consumer fails to comply with the requirement of the notice, WSD can arrange disconnection of supply under the provision of section 10(e) of the Waterworks Ordinance.²

Limitation of the Investigation

- 6. Action under the Waterworks Ordinance can be taken only if we can collect evidence that there is leakage from the water supply pipes.
- 7. If neither visual inspection nor the flow-check positively indicate leakage of water pipes, then either the seepage is not caused by water supply pipe defects, or there could be leakage in water supply pipes encased in walls and floors, which cannot be verified by non-destructive investigation methods. In neither case is enforcement action under the Waterworks Ordinance justified. Under such circumstances, the flat owners/occupiers involved could deal with the problem directly, or with the assistance of their building management, to discuss and agree on a mutually acceptable remedial solution.

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¹ "The Water Authority may, if he is satisfied that a fire service or inside service is in such a condition that waste or pollution of a supply has occurred or is likely to be caused thereby, by notice require the consumer to carry out the repairs or other works specified in the notice to the fire service or inside service."

² "The Water Authority may disconnect a fire service or inside service if the consumer or agent, on receipt of a notice under section 16, fails to carry out the repairs or other works specified in the notice."

Further Improvement

- 8. In recognition of the limitation of existing methods of seepage investigation, Government departments intend to explore the use of new technology. A consultancy study is being commissioned to develop technical guidelines on the scope, types and methods of inspection and investigation to identify the cause of water seepage in buildings. Various departments including BD, WSD, FEHD and Housing Department are drawing up the requirements for the study. It is intended that the study would start in 2001 for completion in 2002.
- 9. It is envisaged that technical guidelines and testing (non-destructive) methods to be developed or identified in the consultancy study will be used by Government departments and will eventually be adopted as the common standard of inspection and investigation for seepage complaints in buildings.

How CCBS Can Help

10. The proposed Customer Care & Billing System (CCBS) enables easy retrieval of information. This will include consumption records, complaint history and previous repair notice(s) about the flat suspected to have caused the seepage. Such information readily obtainable from the CCBS by all front-line staff will shorten the response time to complaint cases. With information of the contact telephone numbers of consumers in the CCBS, telephone contact with the consumers of the flats to arrange where necessary site inspections can more readily be made. The system can also facilitate issuing of standard correspondences and follow-ups of seepage cases. Front-line staff answering enquiries on present position of investigations can also make use of the information stored in the system to advise enquirers on latest positions readily.

Water Supplies Department February 2001

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