CONTROLLING OFFICER'S REPLY

(Question Serial No. 1481)

Head: (82) Buildings Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Buildings and Building Works

Controlling Officer: Director of Buildings (AU Choi-kai)

Director of Bureau: Secretary for Development

Question (Member Question No. 49):

Complaints against the Joint Office for Investigation of Water Seepage Complaints (JO) often blamed the traditional colour dye testing adopted by staff of the JO for failure to identify the source of water seepage.

In the financial years of 2013-14 and 2014-15, did/will the JO adopt infrared ray testing or other more sophisticated technology for testing?

If yes, what are the details? How is the cost compared with infrared ray testing or other new testing methods? Will it cause the JO to apply for additional operational fund? If yes, what are the details?

Asked by: Hon. TSE Wai-chun, Paul

Reply:

There are many different causes of water seepage in buildings. Having regard to the circumstances of individual cases, the Joint Office (JO) set up by the Food and Environmental Hygiene Department and the Buildings Department will adopt appropriate non-destructive tests to ascertain the source of water seepage, including a series of moisture level measurements, colour water test at drainage outlets, ponding test for floor slabs, water spray test for walls and reversible pressure test for water supply pipes, etc., which are widely adopted and generally recognised to be direct and effective means of investigating the source of water seepage. Apart from visual inspection, JO staff will, as appropriate, conduct various kinds of investigations and tests with the aid of different equipment, such as moisture meter, ultraviolet torch and fluorescence-enhancing glasses. If necessary, JO staff will collect plaster or seepage samples at the seepage spots for analysis by the Government Laboratory.

JO endeavours to keep abreast with the latest technological developments and is working with the Hong Kong Applied Science and Technology Research Institute to explore more effective investigation methods so as to enhance the capability of JO in handling reports on water seepage. JO is also making preparation for commissioning a consultancy study on the latest technological methods for identifying the sources of water seepage in buildings.

JO is aware that there is a number of testing equipment available in the market, such as infrared camera and microwave tomography scanning device, which can ascertain the variation in the moisture content of seepage spot. JO has started applying the said equipment for infrared imaging and microwave 3-D moisture modeling on a trial basis to facilitate identification of seepage source in more complicated water seepage cases. As the application of the above technology by JO is on a trial basis, JO is unable to provide an accurate cost comparison at this stage. The associated expense will be absorbed by the estimated expenditure of JO for 2014-15.