

CONTROLLING OFFICER'S REPLY**DEVB(PL)114****(Question Serial No. 3174)**Head: (82) Buildings DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) Buildings and Building WorksControlling Officer: Director of Buildings (YU Tak-cheung)Director of Bureau: Secretary for DevelopmentQuestion:

1. Please provide the staff establishment and expenditure of the Food and Environmental Hygiene Department and the Buildings Department in connection with the operation of the Joint Office for Investigation of Water Seepage Complaints (JO) in 2020-21.
2. Please provide a breakdown of the numbers of water seepage cases received and handled by JO (including the number of cases in which the sources of seepage were identified by conventional tests), the number of cases in which professional investigation was carried out by JO staff and the number of cases handled by consultants commissioned by JO in 2020.
3. What are the numbers of cases where professional investigation was carried out with the assistance of outsourced consultants and the cost involved in the past five years?
4. In the table below, please provide information on the use of new testing technologies such as infrared thermography and microwave tomography by JO in the eight pilot districts in 2018, 2019 and 2020:

	Central and Western	Wan Chai	Kowloon City	Sham Shui Po	Kwai Tsing	Tuen Mun	Tai Po	North
(a) Cases adopting new testing methods in professional investigation								

	Central and Western	Wan Chai	Kowloon City	Sham Shui Po	Kwai Tsing	Tuen Mun	Tai Po	North
(b) Among the cases in (a), number of cases concluded								
(c) Among the cases in (b), number of cases with source of water seepage identified								
(d) Among the cases in (c), number of nuisance notices (NN) issued								
(e) Among the cases in (d), number of convictions in respect of prosecutions against non-compliance with NN								

5. What is the successful rate of new testing methods as compared with the conventional technologies?
6. Are there any plans to enhance the effectiveness of carrying out water seepage tests? If yes, what is the cost involved?

Asked by: Hon MA Fung-kwok (LegCo internal reference no.: 86)

Reply:

1. The staff establishment and expenditure of the Joint Office (JO) set up by the Food and Environmental Hygiene Department (FEHD) and the Buildings Department (BD) in handling water seepage reports in buildings in 2020-21 are tabulated below –

FEHD	2020-21
Number of investigation and co-ordinating staff	241
Staff cost and departmental expenses (\$ million)	180.5 (estimated)

BD	2020-21
Number of professional and technical staff	82
Staff cost and departmental expenses (\$ million)	65.8 (estimated)
Expenditure for engaging outsourced consultants (\$ million)	36.1 (estimated)

2. Generally speaking, JO staff are responsible for carrying out initial investigation of the source of seepage, such as colour water test for drainage pipes. In cases where the source of seepage cannot be identified during the initial investigation, JO staff will carry out a professional investigation with the assistance of outsourced consultants. Statistics on handling of water seepage reports by JO in 2020 are tabulated below –

Number of Cases	2020
Reports received	39 166
Reports handled ⁽¹⁾	35 397
(a) Cases screened out ⁽²⁾	21 345
(b) Cases with investigation concluded ⁽³⁾	14 052
- Cases with source of water seepage identified	6 746
- Cases with source of water seepage not identified and investigation terminated	3 403
- Cases with seepage ceased during investigation	3 903
(c) Among the cases in (b) above, cases requiring professional investigation ⁽⁴⁾	9 780

Note ⁽¹⁾: The number of reports handled does not necessarily correspond to the number of reports received in the same year.

Note ⁽²⁾: These include unjustified cases not meeting the 35% moisture content criterion and withdrawn cases, etc. where no investigation was conducted by JO.

Note ⁽³⁾: These include cases adopting conventional testing methods and/or new testing methods, including infrared thermography (IT) and microwave tomography (MT).

Note ⁽⁴⁾: Cases requiring professional investigation were carried out with the assistance of outsourced consultants.

3. Statistics of water seepage cases requiring professional investigation by JO staff with the assistance of outsourced consultants in the past five years are tabulated below –

	2016	2017	2018	2019	2020
Number of cases handled by JO staff for professional investigation with the assistance of outsourced consultants	10 451	11 190	9 716	10 078	9 780

Statistics of the expenditure for engaging outsourced consultants in the past four and current financial years are tabulated below –

	2016-17	2017-18	2018-19	2019-20	2020-21
Expenditure for engaging outsourced consultants (\$ million)	31.0	36.6	36.7	27.7	36.1 (estimated)

4. Statistics on professional investigation of water seepage reports by adopting new testing methods such as IT and MT in the eight pilot districts in 2018, 2019 and 2020 are tabulated below –

	Central and Western ⁽⁵⁾	Wan Chai ⁽⁵⁾	Kowloon City ⁽⁵⁾	Sham Shui Po ⁽⁶⁾	Kwai Tsing ⁽⁶⁾	Tuen Mun ⁽⁶⁾	Tai Po ⁽⁶⁾	North ⁽⁶⁾
(a) Cases adopting new testing methods in professional investigation	546	516	810	419	325	349	261	131
(b) Number of cases concluded	369	363	668	306	249	222	147	90
(c) Number of cases with source of water seepage identified	289	323	401	272	150	177	135	68
(d) Number of nuisance notices (NN) issued ⁽⁷⁾	382	410	391	425	150	177	150	31

	Central and Western ⁽⁵⁾	Wan Chai ⁽⁵⁾	Kowloon City ⁽⁵⁾	Sham Shui Po ⁽⁶⁾	Kwai Tsing ⁽⁶⁾	Tuen Mun ⁽⁶⁾	Tai Po ⁽⁶⁾	North ⁽⁶⁾
(e) Number of convictions in respect of prosecutions against non-compliance with NN ⁽⁷⁾	18	23	15	1	1	4	2	0

Note ⁽⁵⁾: New testing methods have been adopted since the second half of June 2018.

Note ⁽⁶⁾: New testing methods have been adopted since September 2019.

Note ⁽⁷⁾: Some cases in (c) did not trigger the issue of NN, e.g. seepage caused by rainwater. More than one NN may be issued for cases that involved co-owners.

5. As at 31 December 2020, the success rate⁽⁸⁾ of cases using the new testing technologies is around 75% which is higher than the success rate of around 65% for cases using the conventional methods.

Cases with source of water seepage identified

Note ⁽⁸⁾: Success rate = $\frac{\text{Cases with source of water seepage identified} + \text{Cases with source of water seepage not identified and investigation completed (viz. cases where investigation has not been completed due to, e.g. seepage ceases to exist during investigation are excluded)}}{\text{Total cases}}$

6. Since the second half of June 2018, JO has applied new testing technologies such as IT and MT in professional investigation in selected pilot districts where applicable. With the experience gained and data obtained through pilot application of the new testing technologies, JO has extended the use of these technologies to a total of 12 districts as of March 2021. It should be noted that in cases where these technologies cannot be effectively applied due to, for example, spalling of concrete ceilings at the locations of water seepage and blockage of pipes and other facilities, the outsourced consultants have to continue to employ the conventional testing methods. JO is refining the technical guidelines and procedures relating to the use of the new technologies and is planning to gradually extend these technologies to other districts with a view to enhancing the efficiency and effectiveness of JO on investigation of water seepages. The estimated expenditure for engaging outsourced consultants increases from \$36.1 million in 2020-21 to \$47.1 million in 2021-22 mainly due to application of the new testing technologies in four more pilot districts.

- End -