

香港申訴專員公署  
Office of The Ombudsman, Hong Kong



主動調查報告  
Direct Investigation Report

滲水投訴調查聯合辦事處處理滲水舉報的成效  
Effectiveness of Joint Office for Investigation of Water  
Seepage Complaints in Handling Water Seepage Reports

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## **Executive Summary Direct Investigation Report**

### **Effectiveness of Joint Office for Investigation of Water Seepage Complaints in Handling Water Seepage Reports**

#### **Introduction**

The Joint Office for Investigation of Water Seepage Complaints (“JO”), which comprises staff from the Food and Environmental Hygiene Department (“FEHD”) and Buildings Department (“BD”), is responsible for conducting investigation to identify the source of water seepage that causes hygiene nuisance and taking necessary enforcement action. Since our last direct investigation of the same topic in 2008, this Office has received complaints from members of the public against JO continuously. The main allegations of those complaints included JO’s failure to identify the source of water seepage despite the lengthy tests of various kinds conducted, and its heavy reliance on the old colour water tests to confirm the source. We also noticed that new testing technologies such as infrared thermography and microwave tomography to identify the source of water seepage have not been widely used by JO, and that its prolonged investigation has led to a huge backlog of cases.

#### **Our Findings**

2. In view of our findings, we have the following comments on the effectiveness of JO’s handling of water seepage reports.

#### ***Effectiveness of Handling of Water Seepage Reports***

##### **(I) Huge Backlog of Cases**

3. In 2018 and 2019, JO had 13,889 and 17,034 uncompleted cases respectively. The backlog was huge. As at June 2020, JO had 23,403 active cases, 8,437 cases of which were received in or before 2019. In our view, JO should proactively examine the reasons for having backlog and take effective action to clear it. The Government should consider allocating more resources to JO, if necessary, so that JO can clear the backlog as early as possible.

(II) Many Cases Require More Than 90 Working Days to Complete Investigation

4. According to JO's operational guidelines, JO can usually complete its investigation into a case and inform the informant of the findings within 90 working days if it is straightforward and the owner/occupant concerned is cooperative. Take 2019, in which JO completed its actions in 30,910 cases, as an example, 64% of the cases were completed within 90 working days while 36% required more than 90 working days to complete. Of the 8,605 cases that JO completed its investigation, 31% were completed within 90 working days while 69% required more than 90 working days, with 41% requiring more than twice the aforesaid processing time. These statistical figures show that many cases (including those where investigation had or had not been conducted) required more than 90 working days to complete actions and it was also common to complete investigations beyond 90 working days. We consider that JO should explore devising practicable reference/performance indicators, examine thoroughly the reasons why some cases required prolonged time to complete actions and formulate improvement measures. Besides, we recommend that JO review its workflow and explore the feasibility of shortening the 20-working-day time-frame for consultants to visit the suspected premises upon case assignment so as to expedite the processing of cases.

(III) Failure to Analyse the Reasons for Prolonged Time (More Than 90 Working Days) to Complete Actions and Compile Relevant Statistics

5. JO explained that as special circumstances might vary in different cases, it could not categorise the reasons why it needed prolonged time to complete actions for some cases, hence no compilation and analysis of relevant statistics. We consider that given the huge number of cases to be handled, JO should compile relevant statistics to examine in a systematic manner the various reasons for taking prolonged time to complete its actions so that it can formulate coping strategies. We understand that as at November 2020 the Review Task Force that was formed to review JO's operation has implemented some measures to streamline the work procedures. We recommend that JO refer to its experience gained in handling cases and devise a case management strategy to enhance the efficiency of handling water seepage reports.

(IV) Operational Guidelines Should Be Revised to Require That Staff Call Owner/Occupant Concerned to Arrange First Visit to Suspected Premises

6. According to JO(FEHD)'s operational guidelines, staff are not required to call the owner/occupant of the suspected premises to arrange the first visit. As a result, they may not be able to gain entry for investigation. We recommend that JO revise the relevant guidelines to state clearly that staff can make good use of investigation resources and call the owner/occupant concerned to arrange the first visit if the informant has provided, among others, the contact telephone number of the owner/occupant of the suspected premises.

(V) Failure to Update Informants Regularly on Investigation Progress during Stage III Investigation and When Conducting Confirmatory Test

7. Prior to September 2019, JO would not update the informants regularly on the progress of investigation when encountering difficulty during Stage III investigation. From September 2019 onwards, the consultants will only update the informants on the progress in writing within 20 to 35 working days after visiting the affected premises, but they will not write to the informants with updates again in case the delay dragged on. JO has planned to revise the terms of contracts offered to its consultants from the first quarter of March 2021 to stipulate that if the consultants cannot visit the suspected premises within 20 working days upon case assignment, they should update the informant in writing on the progress and explain the reasons for not initiating investigation within these 20 working days. If the situation persists, the consultant should update the informant on the progress every 20 working days. We recommend that before introducing this arrangement, JO regularly update the informant on the progress of cases where the consultant has written to the informant and further delays happen. Where it is necessary to conduct confirmatory tests, JO should also write to the informant regularly to provide updates.

(VI) Explore Simplification of Investigation Reports to Expedite Completion of Stage III Investigation

8. Between 2017 and October 2019, there were about 100 cases on average each year where JO instituted prosecution against the owner/occupant concerned for non-compliance with the Nuisance Notice ("Notice") or Nuisance Order. In the same years, the consultants submitted about 10,000 investigation reports to JO each year. In other words, only a small fraction of investigation reports JO received was produced to the

Court. We understand that investigation reports are crucial to water seepage cases and JO should not issue a Notice unless there has been sufficient evidence. However, JO should also consider how to optimise resource utilisation. In this regard, we recommend that JO seek advice from the Department of Justice (“DoJ”) and explore the feasibility of simplifying investigation reports without compromising its enforcement actions so that resources can be better utilised and Stage III investigation can be expedited.

***Effectiveness of Use of New Testing Technologies***

**(VII) Higher Success Rate of New Testing Technologies in Identifying Source of Water Seepage**

9. In 2019, JO achieved a success rate of 76% in identifying the source of water seepage by using new testing technologies including infrared thermography and microwave tomography. On application of new testing technologies in pilot districts, JO’s success rate in identifying the source of water seepage was 32 percentage points higher than that of the conventional colour water tests. This shows that new testing technologies are more effective than the conventional colour water tests in identifying the source of water seepage. Moreover, compared with the conventional colour water tests, the new testing technologies allow the investigator to collect data instantly, hence more effective in improving the efficiency of water seepage investigation. We recommend that JO proactively consider extending the use of the new testing technologies used in the eight pilot districts to other districts for identifying the source of water seepage for more cases.

***Effectiveness of Monitoring***

**(VIII) Failure to Use Water Seepage Complaint Management System to Compile Statistics and Management Reports Though The System Has Been in Place for More Than Two-and-A-Half Years**

10. The Water Seepage Complaint Management System (“WSCMS”) can compile data on the time required for completing different investigation stages and actions, which are crucial in monitoring the work of JO’s staff and the consultants. Given that the WSCMS has been in place since March 2018, we find it difficult to understand why it was not until November 2020 that JO completed inputting and checking the information of cases handled between 2018 and June 2020, tested the function and

accuracy of the WSCMS in compiling statistics and management returns, and started preparing management reports regularly. We urge JO to learn from experience so that it would not face the same situation again.

(IX) Ineffective Monitoring of Consultants

11. The case studies in Chapter 5 of our investigation report reflect the inadequacies of the consultants in handling water seepage reports, which include failure to activate early the application procedures for the Warrant of Entry, late submission of investigation reports, failure to keep properly investigation information and making multiple corrections to investigation reports. Although the consultants concerned eventually rectified their mistakes or implemented remedial measures, the investigation had been delayed, causing inconvenience to the owner/occupant concerned. We consider it necessary for JO to step up its monitoring of consultants. On the other hand, a case showed that JO issued warning letters and adverse reports to a consultant that had delays in initiating investigation and submitting the investigation report. The consultant was subsequently debarred from the tender for providing consultancy service for BD for three months only. We doubt the deterrent effect of the penalty and whether it can improve the consultant's performance. We recommend that JO(BD) discuss with its bureau on enhancing penalty for consultants with poor performance so as to create deterrent effect.

(X) Devising Reference/Performance Indicators

12. JO intends to act on the Review Task Force's recommendation and formulate practicable performance indicators for straightforward cases, and to publish regularly its service performance. We recommend that JO devise practicable reference/performance indicators for complicated cases as well so that the public will be informed of, and its staff will abide by, such indicators, and JO will have benchmarks for internal monitoring, thereby avoiding prolonged investigation and slow progress.

***Other Aspects***

(XI) Moisture-content Threshold for Initiating Investigations

13. Among the public views we received, some consider the threshold of investigation set by JO to substantiate the presence of water seepage condition too high. JO explained that concrete and the surface of plaster are susceptible to the relative

humidity of the surroundings. Based on its experience in handling water seepage cases and relevant data, it is difficult to identify the source of water seepage if the moisture content of concrete and the surface of plaster is below 35%. Hence, JO has set the moisture-content threshold at 35% or above to ensure effective use of resources. We refrain from commenting on JO's threshold of investigation regarding moisture content because it is a professional judgement of JO.

(XII) Issuing Notices and Instituting Prosecutions during Stage III Investigation

14. Regarding the public view that the practices of having JO(FEHD) staff issue Notices according to the results of Stage III investigation and instituting prosecutions against owners failing to comply with the Notices are inefficient, we are of the view that the nuisance caused by water seepage is essentially related to environmental hygiene. Given that FEHD is the department enforcing the Public Health and Municipal Services Ordinance, it is not unreasonable for its staff to take up the two tasks. What members of the public are most concerned about is the efficiency of enforcement action rather than which department should undertake those tasks. We consider that JO should review the existing arrangements and decide whether they are the best way to ensure efficiency. Otherwise, it should look into the reasons and make improvement.

(XIII) Appoint a Lead Department to Coordinate and Monitor JO's Operation and Establish a "Case Manager" System

15. JO is jointly operated by FEHD and BD, and this mode of operation may cause the enforcement responsibilities to split up. We learn from the public views that some JO staff consider the division of labour between the two departments unreasonable while others find that the absence of a lead department has caused conflicts and disputes among staff of different professional backgrounds. We are concerned that staff from FEHD and BD may work in silos, lack coordination and lack determination to resolve problems in the absence of a coherent management structure overseeing JO's operation. The inadequacies in JO's handling of water seepage reports including prolonged investigation and ineffective monitoring of consultants have persisted for many years. Hence, it is necessary for JO to have a lead department coordinate and monitor its operation and be accountable for its performance. The setting up of regional joint offices has helped improve the communication between JO staff from FEHD and BD, but it is insufficient for tackling the said problems. We recommend that JO promptly explore and confirm the designation of a lead department so that the lead department will coordinate and monitor JO's operation. While we agree that the current work

arrangement of JO could achieve synergy between the two departments, we are of the view that appointing a lead department would enhance the synergy between the two departments, given the public's expectation of resolving water seepage problems early and JO's prolonged structural problem. Currently, JO does not have a "case manager" system. We consider establishing a "case manager" system would facilitate close monitoring of case progress and provide members of the public with a single contact point to enquire about case progress. The Government's intervention of water seepage problems is fundamentally to deal with hygiene nuisance and safeguard public health. We recommend that JO proactively consider appointing a lead department and establishing a "case manager" system, and putting forward this recommendation to the Review Task Force for consideration.

#### (XIV) Whether Composition of JO Should Include the Water Supplies Department

16. Some are of the view that the Water Supplies Department ("WSD") should be included in the composition of JO. In our opinion, the establishment of JO aimed at identifying the source of water seepage that causes nuisance and taking necessary enforcement action. Normally, leakage of fresh water mains does not constitute environmental hygiene nuisance as the water seepage is not caused by unclean water. It is, therefore, justifiable not to include WSD in the composition of JO. For members of the public, nuisance arising from water seepage at the ceiling will always be disturbing regardless of the source of seepage being fresh water or otherwise, and they certainly have a reasonable expectation that JO would resolve the problem for them. In fact, every year JO refers to WSD several hundred water seepage cases allegedly caused by leakage of fresh water mains for follow-up action. We consider it more important to have WSD's early involvement than having the Department itself included in the composition of JO. We are pleased to note that JO will discuss with WSD about making it a regular arrangement to refer water seepage reports involving continuous dripping at a steady rate to WSD for early intervention.

#### (XV) Handling Water Seepage Caused by Unauthorised Building Works

17. There are views that BD lacks initiative in handling cases referred to its headquarters by JO(BD), which involve water seepage caused by unauthorised building works ("UBWs"), and simply requests that the owner of premises with unauthorised subdivided flats, which causes water seepage, resolve the seepage problem instead of eradicating the UBWs. In our opinion, it is BD's professional judgement to determine whether the UBWs have caused the water seepage and whether the UBWs should be

eradicated, hence we will not comment on this. As to whether the owner concerned should handle the problem of water seepage or UBWs first, we consider that if the UBWs in question fall into the priority categories of actionable cases, BD should issue a removal order to demand the owner concerned to eradicate the structures. Otherwise, JO should issue a Notice to the owner concerned to resolve the environmental hygiene nuisance caused by water seepage and BD should take enforcement action against the UBWs in accordance with its enforcement priorities.

(XVI) Resolving Water Seepage Disputes by Way of Mediation

18. Among those cases where actions were completed between 2018 and June 2020, JO discontinued its follow-up in around 14% to 17% of them during investigation each year either because the water seepage had stopped or the informant had withdrawn the report. We believe it is possible that in some cases the water seepage stopped because the owner/occupant of the premises that have water seepage made the necessary repairs after JO's intervention. We recommend that JO refer to the Free Mediation Service Scheme for Building Management offered by the Home Affairs Department and explore the introduction of mediation services to help owners find win-win solutions for disputes over water seepage and improve communication and mend fences between neighbours.

**Recommendations**

19. In the light of the above, The Ombudsman has made the following recommendations to JO:

- (1) proactively identify causes of and devise strategies to clear the backlog. Where necessary, the Government should consider allocating more resources to JO;
- (2) review and improve its workflow: explore shortening the time-frame for consultants' visits to the suspected premises upon case assignment; call the owner/occupant of the suspected premises to arrange the first visit where possible; update the informant on the case progress regularly; review whether the practice of having FEHD staff issue the Notice according to the results of Stage III investigation and institute prosecutions against owners are the best way to achieve the aim;

- (3) explore, in consultation with DoJ, the feasibility of simplifying investigation reports without compromising its enforcement actions;
- (4) explore the setting up of a mechanism for finding the reasons for prolonged time (more than 90 working days) needed to complete actions and compiling statistics so as to devise a case management strategy to enhance the efficiency of handling water seepage reports, and devise practicable reference/performance indicators for handling complicated cases;
- (5) proactively consider extending the initiative of using new testing technologies in the pilot districts to other districts for identifying the source of water seepage;
- (6) JO(BD) to step up monitoring of its consultants, and discuss with its bureau on enhancing penalty for consultants with poor performance;
- (7) proactively consider restructuring its setup so as to put itself under a lead department and establishing a “case manager” system; and
- (8) implement as early as possible the interim recommendations made by the Review Task Force formed by the relevant bureaux and departments, including setting up the New Territories East Regional Joint Office as planned, discussing with WSD the regularisation of JO’s referral of water seepage reports, enhancing the WSCMS and publishing its performance results regularly, setting up a customer service team and streamlining work procedures, and explore introducing mediation service to resolve disputes over water seepage.

# *1*

## *INTRODUCTION*

### **BACKGROUND**

**1.1** High-rise buildings are everywhere in Hong Kong. Poorly maintained water pipes or defective waterproofing floor slabs of an upper floor premises would likely cause seepage to the premises below, giving rise to environmental hygiene nuisance. Upon receipt of a water seepage report, the Joint Office for Investigation of Water Seepage Complaints (“JO”), which comprises staff from the Food and Environmental Hygiene Department (“FEHD”) and the Buildings Department (“BD”), will conduct investigation. Should an upper floor premises be confirmed as the source of water seepage, JO may issue a Nuisance Notice (“Notice”) requiring that premises to carry out necessary repairs.

**1.2** In 2008, this Office completed a direct investigation into the handling of water seepage complaints by FEHD, BD and the Water Supplies Department (“WSD”). In that direct investigation, we examined the effectiveness of the JO scheme in handling water seepage complaints and made a number of recommendations including reviewing the guidelines for entry into premises, taking enforcement action against multiple owners where warranted and establishing a mechanism to resolve conflicting views on enforcement responsibilities among FEHD, BD and WSD.

**1.3** Upon completion of the above direct investigation, we continue to receive complaints against JO. A lot of citizens complained that JO often failed to identify the source of water seepage despite the prolonged tests conducted. Others complained that JO still relied heavily on such primitive techniques as colour water tests to identify the source of water seepage. This Office noticed that while JO would engage consultants to employ relatively newer testing technologies (such as infrared thermography or microwave tomography) for the more complicated cases, such practice is not common. As a result, JO’s overall success rate in identifying the source of water seepage could

hardly be enhanced. In addition, JO's prolonged investigations have led to a huge backlog of water seepage cases.

## **SCOPE AND PROCESS OF INVESTIGATION**

**1.4** Against this background, The Ombudsman initiated a direct investigation on 5 November 2018, pursuant to section 7(1)(a)(ii) of The Ombudsman Ordinance, to examine the effectiveness of JO in handling water seepage reports and to identify areas for improvement.

**1.5** In the course of investigation, this Office has:

- (1) invited members of the public to give their views and studied the 50 submissions received (see Chapter 7);
- (2) studied the complaint cases against JO filed with this Office;
- (3) examined the information provided by JO; and
- (4) met with the management of JO for in-depth discussions.

**1.6** On 13 November 2020, we issued our draft investigation report to JO for comments. After considering its comments, we finalised this investigation report on 14 December 2020.

# 2

## ***ESTABLISHMENT, DIVISION OF RESPONSIBILITIES AND OPERATIONAL GUIDELINES OF JO***

### **ESTABLISHMENT AND DIVISION OF RESPONSIBILITIES**

**2.1** In 2003, Team Clean<sup>1</sup> published the Team Clean Report. It stated that water seepage in buildings can be a complicated matter usually involving various causes which may be difficult to trace. While FEHD, BD and WSD could take months to complete the investigation process, the source of water seepage in most cases could not be identified. Therefore, Team Clean recommended setting up a working team vested with both the legal powers of FEHD in handling water seepage nuisance under the Public Health and Municipal Services Ordinance (“PHMSO”) and the building surveying expertise of BD. This synergy allows JO to conduct investigations more effectively to identify the source of water seepage causing health nuisance and take enforcement actions accordingly. JO, comprising staff of both FEHD and BD, was thus formally established and started operation in 2006. As at November 2020, JO has three Regional Joint Offices (“RJOs”), namely the Hong Kong RJO, Kowloon RJO and the New Territories West RJO, as well as four district offices<sup>2</sup>.

**2.2** The work arrangements of JO are mutually agreed upon by FEHD and BD. The two departments jointly oversee the management, operation and performance of JO.

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<sup>1</sup> Team Clean, chaired by the Chief Secretary for Administration, comprised the permanent secretaries of several policy bureaux or heads of Government departments.

<sup>2</sup> The four district offices are in Tai Po, Sha Tin, Sai Kung and the North District.

FEHD staff of JO are mainly responsible for conducting Stages I and II investigations into water seepage problems (see **Fig. 1** under **para. 2.5**). They are also responsible for executing the relevant provisions of the PHMSO which include issuing Notices to demand owners to abate the nuisance within a specified period and referring non-compliant cases to the Prosecution Section of FEHD for prosecution. BD staff of JO are mainly responsible for conducting Stage III investigations into complicated cases (see **Fig. 1** under **para. 2.5**) with their professional knowledge of building surveying to identify the source of water seepage and referring confirmed cases back to FEHD staff of JO for enforcement actions in accordance with the PHMSO. Where necessary, they would appear in court hearings as prosecution witnesses. For differentiation, we would use “JO(FEHD)” and “JO(BD)” to identify the relevant sections within JO in the ensuing chapters.

## **THE PUBLIC HEALTH AND MUNICIPAL SERVICES ORDINANCE**

**2.3** The relevant provisions of the PHMSO are as follows.

- (1) Section 12(1)(a): any premises or drains, etc. in such a state as to be a nuisance or injurious or dangerous to health, the Authority<sup>3</sup> may, under section 127, serve a Notice on the person concerned, requiring that person to abate the seepage nuisance within the period specified in the Notice. Non-compliance is subject to prosecution.
- (2) Section 126: any public officer authorised in writing by the authorising authority<sup>4</sup> shall have a right to enter any premises at the time specified to carry out any tests, the carrying out of which is authorised. Provided that admission to any premises has been refused or that refusal is apprehended, a magistrate may by warrant (“Warrant of Entry”) authorise any public officer to effect entry, if need be by force.
- (3) Section 127(1): the Authority, if satisfied of the existence of a nuisance to which the PHMSO applies, may serve a Notice on the person concerned, requiring that person to abate the nuisance within the period specified in the Notice. Failure to comply is an offence.

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<sup>3</sup> The “Authority” for the purposes of each section of the PHMSO specified in the first column of Schedule 3 is the public officer specified opposite to it in the second column of that Schedule.

<sup>4</sup> “Authorising authority” refers to any public officer authorised to enforce the PHMSO.

- (4) Section 127(3) (b): any person failing to comply with any of the requirements of the Notice within the period specified therein shall be guilty of an offence.
- (5) Section 127(4) (a): any person failing to comply with any of the requirements of the Notice within the period specified therein, the Authority may make a complaint to the court and the court hearing the complaint may make a nuisance order (“Order”).
- (6) Section 127(7) (a): any person who fails without reasonable excuse to comply with, or knowingly contravenes, an Order shall be guilty of an offence.
- (7) Schedule 9: any person failing to comply with a Notice is liable to a maximum fine of \$10,000 and a daily fine of \$200; while failing to comply with an Order is liable to a maximum fine of \$25,000 and a daily fine of \$450.

## **OPERATIONAL GUIDELINES**

### ***Visiting the Premises Suspected to be the Source of Water Seepage***

**2.4** The staff of JO and JO’s consultants would carry out investigations at the premises suspected to be the source of water seepage (“suspected premises”). If no one answers the door, the case will be handled according to the following procedures:

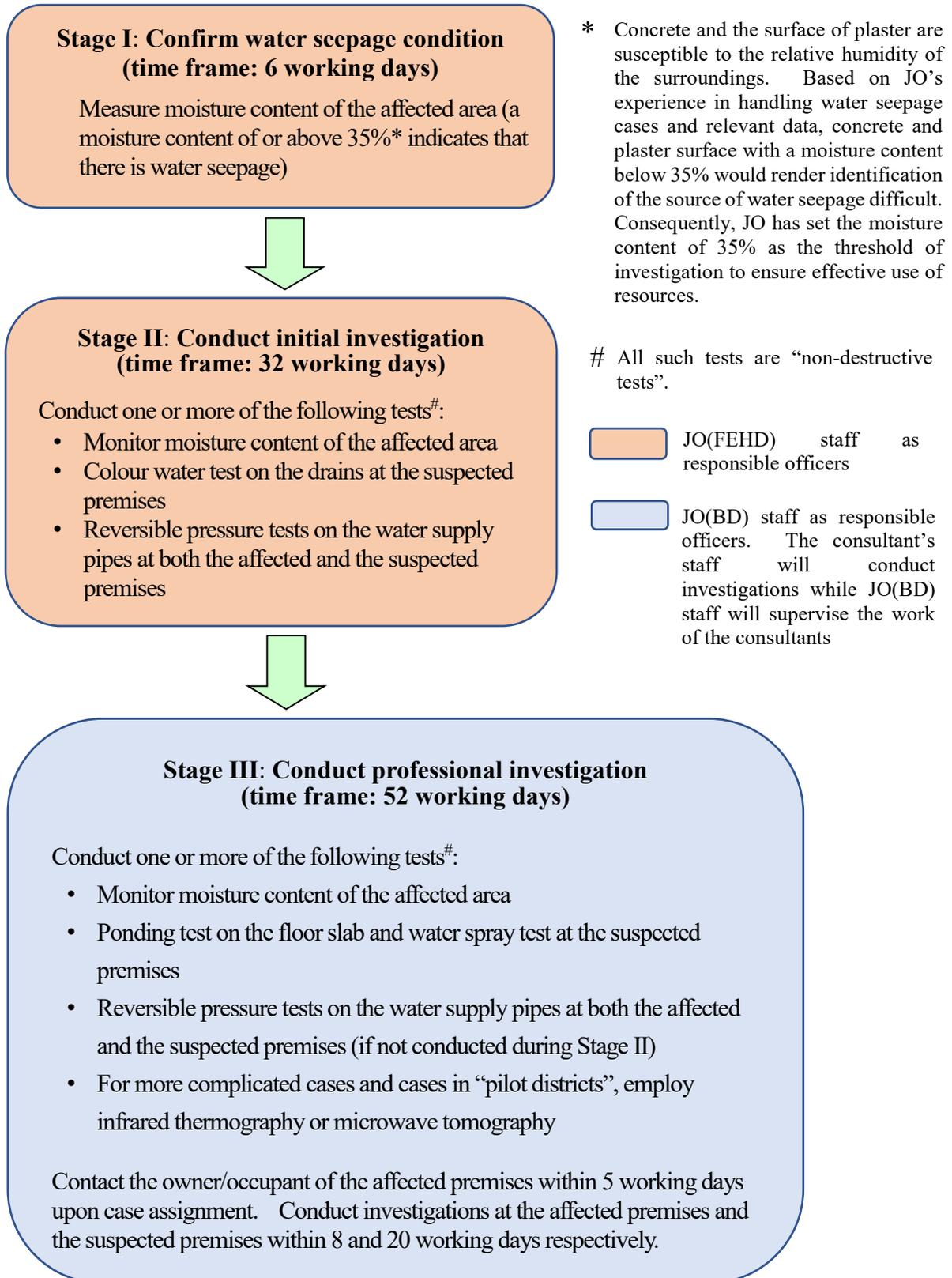
- (1) issue an “Appointment Notice”;
- (2) if there is no feedback, try to contact the owner/occupant of the suspected premises within seven working days of issuing the “Appointment Notice” for arranging an investigation;
- (3) if arrangement with the owner/occupant of the suspected premises still cannot be made, issue a Notice of Intended Entry (“NOIE”) specifying the date and time of revisit;

- (4) if the door remains unanswered upon revisit according to the date and time specified in the NOIE, issue a Notice of Intention to Apply for Warrant of Entry (“NOIA”); and
- (5) in the absence of response after a week, consider applying for a Warrant of Entry from the court.

### ***Investigation Procedures and Action Time Frames for Handling Straightforward Cases***

**2.5** In general, there are three stages in the investigation of water seepage cases. JO can usually complete its investigation into a case and notify the informant of the findings within 90 working days if the case is straightforward and the owner/occupant concerned is cooperative. The major investigation procedures and action time frames for straightforward cases are shown in **Figure 1**. JO indicated that the action time frames are for reference purposes and applicable to straightforward cases (i.e. cases not involving problems like investigation officers being unable to enter the premises in question, difficulties in tracing the source of water seepage, multiple sources of water seepage, multiple tests to be done or investigation results to be confirmed by the Government Laboratory). The actual time needed to complete cases varies and depends on their complexity, the testing methods employed and the caseload and manpower of JO. Cases that involve laboratory testing of samples, subdivided flats or application for a Warrant of Entry to the court may need longer processing time.

**Figure 1: Major investigation procedures and action time frames for straightforward cases**



**2.6** JO asserted that its investigation and collection of evidence must meet the strict standard of the criminal laws. As such, the relevant procedures are devised to ensure the admissibility of evidence at the court. Before issuing a Notice, JO must be certain of the proper conduct of investigation and tests and sufficiency of justifications and evidence. JO staff must scrutinise the consultant's reports including the scope, procedures, durations and results of the tests, etc. to ensure their accuracy.

**2.7** If the source of water seepage remains unidentified despite the above “non-destructive tests” (see **Note #** to **Fig. 1** under **para. 2.5**) (meaning that the tests would not damage the existing condition of both the affected premises and the suspected premises including their sanitary fitments, drainage systems, decorative wall surface or floor slab, etc.), JO would have no choice but to cease investigation even if seepage continues.

**2.8** If the investigation is fraught with difficulties, with respect to Stage II investigations, JO(FEHD) would notify the informant of the investigation progress with the contact details of the case officer every 30 calendar days upon receipt of the report. With respect to Stage III investigations, JO(BD) has since September 2019 required the new batch of consultants to update informants on the investigation progress in writing within 20 to 35 working days upon visiting the affected premises. The consultancy contracts signed prior to that did not have this requirement. JO(BD) would revise the relevant terms in the consultancy contracts awarded from the first quarter of 2021 to specify that if the consultant cannot conduct an investigation at the suspected premises within 20 working days upon case assignment, it should update the informant in writing on the case progress and provide reasons for not initiating an investigation in the said period. If the consultant is still unable to carry out an investigation at the suspected premises in the next 20 working days, it has to update the informant in writing on the case progress and provide reasons for not initiating an investigation in the said period again. This will continue until the consultant can enter the suspected premises to conduct investigation.

### ***Investigation Records***

**2.9** Between November 2000 and February 2018, JO(FEHD) was using FEHD's “Complaint Management Information System” (“CMIS”) to record investigation information. While the consultants would not input investigation information into the CMIS, they would submit a “bi-weekly report” in the form of Excel spreadsheet to

JO(BD) to set out the investigation details.

**2.10** The major function of the CMIS is information keeping. It has a reminder and alert function to prompt JO(FEHD) staff to issue interim and substantive replies to informants, and calculate the time taken to complete all actions in a case. However, it cannot calculate the time needed for completing different stages of investigation.

**2.11** The Audit Commission recommended in its report in 2016 that a comprehensive database system for managing and recording water seepage cases should be set up. JO subsequently put in place the “Water Seepage Complaint Management System” (“WSCMS”). Since March 2018, JO has been inputting into the System investigation information, together with the dates of receiving water seepage reports and the contact details of the informants. The consultants would still record their investigation information in the bi-weekly reports for JO(BD) staff to upload to the WSCMS.

**2.12** The WSCMS is capable of case management at different stages of investigation, including performing statistical analysis on the time needed for completing the various stages of investigation and that for all actions required. The WSCMS will also issue reminders and alerts for delayed cases.

**2.13** When the WSCMS was commissioned in March 2018, JO started data entry on the System for all cases that were still under processing since January that year. For cases with all actions completed before 2018, their data were not entered on the WSCMS. JO has to check the data entered and based on such data, test the function and accuracy of the System in compiling statistics and management returns. To further enhance the functions of the WSCMS, improve accuracy of data entry and solve problems encountered while using the WSCMS, JO has held a number of work meetings with the System’s contractor since June 2018. JO also conducted tests on the System regularly to ensure that the newly added functions could produce the expected results. As at November 2020, JO has entered data for all cases processed between 2018 and June 2020, verified the input data and tested the function and accuracy of the System in compiling statistics and management returns. JO can since carry out statistical analyses on the different stages of investigation for cases captured by the WSCMS.

# 3

## ***JO'S MONITORING MECHANISM***

### **SELF-MONITORING MECHANISM**

#### ***JO(FEHD)***

**3.1** In February 2015, FEHD issued an updated administrative circular to its staff at JO(FEHD), requiring them to strictly adhere to the work procedures, time frames and priorities in handling water seepage reports, and to input case information into the CMIS properly and timely. In monitoring their subordinates' work, supervisors should make use of the monthly analysis on outstanding cases in excess of 90 working days upon receipt (referred to as "prolonged cases" hereafter) to identify the reasons for inaction in such cases and provide guidance or assistance to their subordinates. To expedite case handling, prolonged cases and repeated reports have been included in the agendas of the management meetings of the Environmental Hygiene Branch of the FEHD Headquarters and the District Environmental Hygiene Offices ("DEHOs") that are held every two to three months.

**3.2** Since January 2016, the Complaints Management Section of FEHD would, on a monthly basis and for reference purposes, inform the officers-in-charge of DEHOs of the total number of prolonged cases by email. Since July 2011, such monthly reports also included the details of prolonged cases for reference and more vigorous monitoring by the management of FEHD and BD. If the management staff of the Hygiene Section at the FEHD Headquarters find in the monthly reports any unusual backlog of prolonged cases, they would request JO(FEHD) to expedite their actions.

## ***JO(BD)***

**3.3** The district officers-in-charge at JO(BD) would make use of the monthly reports provided by FEHD's Complaints Management Section and the bi-weekly reports submitted by the consultants to monitor the progress of prolonged cases being handled by their staff and consultants, and require them to expedite case handling. Besides, they would, on the merit of individual cases, supervise and take part in resolving the difficulties and problems encountered in the course of expediting case handling. In addition, to report and follow up on prolonged cases is a regular agenda item of the bi-weekly operation meetings between BD and its consultants.

**3.4** As far as the overall case progress is concerned, the district officers-in-charge of BD should, in addition to monitoring case progress, follow BD's established mechanism to monitor and manage the performance of consultants, including issuing reminders and warnings to the consultants concerned in a timely manner to expedite investigations, and reporting to their supervisors on the consultants' performance with quarterly performance appraisal reports on them submitted to reflect the status of prolonged cases. For under-performing consultants (including unsatisfactory overall case progress), a BD directorate officer will meet with their project directors and demand rectification including implementing measures to expedite the handling of prolonged cases. The Officer would, depending on the situation, consider the need for an adverse performance appraisal report on the consultant.

**3.5** Should a consultant receive consecutively two or three adverse performance appraisal reports in a single contract period, BD would demand an explanation from the consultant at the regular Consultant Review Committee and require it to proactively improve its performance and services. It would, in accordance with the established mechanism, suspend the consultant's eligibility for bidding for similar service contracts for at least 3 or 12 months. A consultant's performance appraisal reports for all contracts of the past three years would affect its scores and chance of winning when it bids for future BD contracts.

**3.6** Furthermore, since November 2009, BD and JO(BD) would hold bi-monthly meetings chaired by an Assistant Director to review and monitor JO's overall operation, performance and progress including reviewing cases with serious delay, supervising JO(BD) staff to expedite the handling of prolonged cases and taking timely actions against consultants with unsatisfactory performance.

## **MECHANISM FOR MONITORING CONSULTANTS**

**3.7** The consultancy contracts signed since May 2017 require that consultants submit bi-weekly reports in the format specified by JO(BD), which includes a function to flag up cases requiring processing time longer than the specified time frames in the contract so that JO(BD) can better monitor the consultants' performance. Effective July 2017, JO(BD) would perform procedural checks based on the bi-weekly reports submitted by the consultants to monitor their compliance with the time frames for conducting investigations as specified in the contracts. The collated statistics cover the consultants' compliance with the time frames for conducting inspections and tests at the affected and the suspected premises, checking test results at the affected premises and submitting investigation reports upon checking the test results. Besides, the time for completing these tasks would be analysed statistically with corresponding follow-up actions taken.

**3.8** JO(BD) holds bi-weekly meetings with the consultants, who must furnish JO(BD) with the bi-weekly report (see **para. 2.9**) in advance. To report and follow up on prolonged cases is a regular agenda item of the bi-weekly meetings (see **para. 3.3**).

**3.9** According to BD's established mechanism for monitoring and managing consultants' performance, the district officers-in-charge of JO(BD) have to submit quarterly performance appraisal reports on the consultants. JO(BD) staff have to review the consultants' performance on a quarterly basis and issue reminders, warnings and adverse performance appraisal reports to the consultants with unsatisfactory performance in a timely manner (see **para. 3.4**).

**3.10** JO(BD) has since July 2017 adopted measures to strengthen the monitoring of the consultant's effectiveness and progress of investigations. Such measures include conducting random surprise site audits and questionnaire surveys with the owners/occupants of the premises concerned. Based on the progress or appointment reports submitted by the consultants, the professional officers of JO(BD) would conduct at least two random surprise site audits every month to monitor whether the consultants have followed the contract requirements and the relevant technical guidelines in conducting investigations and tests. If non-compliance is found, JO(BD) would double the number of surprise site audits on the consultant in the following month, until the consultant improves its performance. To facilitate quality assurance of the consultant's work, JO(BD) staff would normally administer a questionnaire survey with the owners/occupants of the premises alongside their random surprise site audits. The

owners/occupants would be asked to provide feedback on such aspects as whether the consultant has taken the initiative to contact them and make an appointment for conducting tests; whether the consultant has explained to them the purpose of Stage III investigation, the testing procedures and details, the follow-up actions; and whether the owners/occupants are satisfied with the consultant's performance, etc. For problematic cases identified out of the questionnaire survey, JO(BD) staff would follow up and demand the consultants concerned to improve.

**3.11** The numbers of cases in which JO conducted random site audits between 2018 and June 2020, and JO's actions against consultants with unsatisfactory case progress or performance are shown in **Table 1**.

**Table 1: JO's random site audits and actions against consultants with unsatisfactory performance**

		Year			
		2018	2019	2020 (as at June)	
(1)	No. of cases in which consultants were assigned to conduct Stage III investigations ( <i>a</i> )	11,103	12,135	4,528	
(2)	No. of random site audits ( $(b)=(d)+(e)$ )	179	233	66	
(3)	Ratio of audit $((c)=\frac{(b)}{(a)}\times 100\%)$	1.6%	1.9%	1.5%	
(4)	Whether the consultant had followed the contract requirements and the relevant technical guidelines in investigations	Yes (no.) ( <i>d</i> )	178	232	66
(5)		No (no.) ( <i>e</i> )	1	1	0
(6)	Actions against consultants with unsatisfactory case progress or performance (in terms of the most serious)	Issuing warning letters (no.) ( <i>f</i> )	4	13	6
(7)		Giving adverse performance appraisal reports (no.) ( <i>g</i> )	3	6	2

(8)	action taken)*	Debarring from bidding for new consultancy contracts (h)	1	0	1
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\* Including cases in which no random site audits had been conducted.

**3.12** Details of JO's questionnaire surveys with owners/occupants on cases followed up by consultants between 2018 and June 2020 are shown in **Table 2**.

**Table 2: JO's questionnaire surveys on cases followed up by consultants**

Year	No. of cases assigned to consultants for Stage III investigation (a)	No. of questionnaires JO received (b)	Ratio of owners/occupants satisfied/dissatisfied with the consultants		No comment/ feedback on this item in the questionnaire (e)
			Satisfied (c)	Dissatisfied (d)	
2018	11,103	149	99% (100)	1% (1)	48
2019	12,135	267	97% (152)	3.2% (5)	110
2020 (As at June 2020)	4,528	80	100% (64)	0	16

# 4

## ***CASELOAD, INVESTIGATION AND ENFORCEMENT OF JO***

### STATISTICAL ANALYSIS

#### ***Number of Cases Received, Cases with Actions Completed and Outstanding Cases***

**4.1** The caseload of JO between 2018 and June 2020 (including the numbers of water seepage reports received that year and those carried forward from the previous year because of unaccomplished actions) is in **Table 3**.

**Table 3: Number of cases received, cases with actions completed and outstanding cases**

	<b>Year</b>	<b>No. of reports received (a)</b>	<b>No. of cases carried forward from previous year (b)</b>	<b>Total no. of cases ((c)= (a)+(b))</b>	<b>Cases with actions completed (d)</b>	<b>Outstanding cases ((e)= (c)-(d))</b>
(1)	2018	34,220	10,077 <sup>#</sup>	44,297	30,408	13,889
(2)	2019	34,055	13,889	47,944	30,910	17,034
(3)	2020 (As at June)	20,212	17,034	37,246	13,843	23,403

<sup>#</sup> JO indicated that the figure may be different from the actual figure.

## Cases with Actions Completed

4.2 The statistics of cases for which JO completed actions between 2018 and June 2020 are shown in **Table 4**.

**Table 4: Statistics of cases for which JO has completed actions**

	Year		
	2018 (a)	2019 (b)	2020 (As at June 2020) (c)
(1) No. of reports received (i)	34,220	34,055	20,212
(2) No. of cases carried forward from previous year (ii)	10,077	13,889	17,034
(3) No. of cases screened out ^ (iii)	16,888 (56%)*	17,186 (56%)*	8,302 (60%)*
(4) No. of cases terminated because water seepage ceased/the informant withdrew the report during investigation # (iv)	4,419 (15%)*	5,119 (17%)*	1,941 (14%)*
(5) No. of cases with source of water seepage identified (v)	6,264	6,017	2,875
(6) No. of cases with source of water seepage unidentified (vi)	2,837	2,588	725
(7) No. of cases with investigation completed ((vii)=(v)+(vi))	9,101 (30%)*	8,605 (28%)*	3,600 (26%)*
(8) Ratio of cases with source of water seepage identified (%) $((viii)=\frac{(v)}{(vii)} \times 100\%)$	69%	70%	80%

(9)	Ratio of cases with source of water seepage unidentified (%)  $((ix) = \frac{(vi)}{(vii)} \times 100\%)$	31%	30%	20%
(10)	No. of cases with actions completed  $((x) = (iii) + (iv) + (v) + (vi))$	30,408	30,910	13,843
(11)	No. of cases carried forward to the following year  $((xi) = (i) + (ii) - (x))$	13,889	17,034	Not applicable

<sup>^</sup> Cases screened out include cases in which the nature of the report was not related to water seepage, water seepage originated from the affected premises, the informant withdrew the report, the moisture content of the affected area was below 35% and the affected area was part of an unauthorised structure.

<sup>#</sup> These are cases in which JO has conducted Stage II or Stage III tests. Nevertheless, water seepage had ceased /the informant had withdrawn the report.

<sup>\*</sup> Figure in brackets represents the percentage of such cases over the total number of cases with actions completed (row (10)).

### ***Difficulties Encountered during Investigation***

**4.3** JO explained that it has to conduct non-destructive tests at the suspected premises systematically (see **para. 2.7**) in order to confirm the source of water seepage. Investigation progress is subject to a host of factors such as the moisture content of the affected area, water seepage coming from multiple sources, the characteristics of the construction materials, the design and construction of the building and pipe ducts, the location of the pipes/drainage, whether the affected area is blocked by other facilities, water usage of the suspected premises and whether the owner/occupant of the suspected premises is cooperative or not, etc. These factors, beyond the control of JO, can affect JO's success rate in identifying the sources of water seepage and the time needed to complete actions for a case (see **row (8)** of **Table 4** under **para. 4.2** and **rows (5)–(8)** of **Table 5** under **para. 4.7**).

**4.4** As at June 2020, there are 23,403 outstanding cases, of which 8,437 were received in or before 2019. JO explained that the huge backlog was due to the sharp increase in the number of water seepage reports it received and the various challenges it was facing including failure to contact the owners/occupants concerned or gain their

cooperation in the course of investigation and limitations of the testing methods. If the staff of JO or the consultants are denied entry into the suspected premises to conduct investigation, JO has to apply for a Warrant of Entry from the court in accordance with the requirements and procedures set out in the PHMSO (see **para. 2.4(5)**) before they can enter the premises for investigation. Furthermore, given investigation and collection of evidence must meet the strict standard of the criminal laws, the relevant procedures must be devised to ensure admissibility of the evidence at the court. For complicated cases, investigators have to conduct different, continual or repeated tests and monitoring. All these would affect the time an investigation may take.

### ***Time Needed for Completing Actions in Cases***

**4.5** JO can usually complete its investigation of a case and notify the informant of the findings within 90 working days if the case is straightforward and the owner/occupant concerned is cooperative (see **para. 2.5**).

**4.6** Since the commissioning of the WSCMS in March 2018, JO has only been entering on the System data of the cases it has handled since 2018, but not those with actions completed before that year (see **para. 2.13**). Consequently, as far as yearly statistics are concerned, the WSCMS only contains data of the cases with JO's completed actions since 2018. By November 2020, JO had entered on the WSCMS data of all cases it processed between 2018 and June 2020, verified the input data and tested the function and accuracy of the System in compiling statistics and management returns. JO can since perform statistical analyses on the different stages of investigation for cases captured by the WSCMS (see **para. 2.13**).

**4.7** The time JO took to complete actions for cases (regardless of the result) between 2018 and June 2020 is shown in **Table 5**. The time JO took to complete cases requiring investigation is shown in **Table 6**.

**Table 5: The time JO took to complete actions for cases**

		Year			
		2018 (x)	2019 (y)	2020 (as at June) (z)	
(1)	No. of reports received (a)	34,220	34,055	20,212	
(2)	No. of cases carried forward from the previous year (b)	10,077	13,889	17,034	
(3)	No. of cases with actions completed <i>((c)=(e)+(f)+(g)+(h))</i>	30,408	30,910	13,843	
(4)	Ratio of cases with actions completed (%)  <i>((d)= <math>\frac{(c)}{(a)+(b)} \times 100\%</math>)</i>	69%	64%	37%	
(5)	Time taken to complete cases (no. of working days)	≤90 (e)	19,770 (65%) <sup>Δ</sup>	19,689 (64%) <sup>Δ</sup>	9,561 (69%) <sup>Δ</sup>
(6)		91-180 (f)	5,280 (17%) <sup>Δ</sup>	5,201 (17%) <sup>Δ</sup>	1,995 (14%) <sup>Δ</sup>
(7)		181-270 (g)	3,376 (11%) <sup>Δ</sup>	3,410 (11%) <sup>Δ</sup>	1,470 (11%) <sup>Δ</sup>
(8)		≥271 (h)	2,054 (7%) <sup>Δ</sup>	2,610 (8%) <sup>Δ</sup>	817 (6%) <sup>Δ</sup>

<sup>Δ</sup> *Figures in brackets represent the percentages of cases concerned over the total number of cases with actions completed (row (3)).*

**Table 6: The time JO took to complete cases requiring investigation**

		Year			
		2018 (x)	2019 (y)	2020 (As at June) (z)	
(1)	No. of cases with investigation completed <i>((a)=(d)+(e)+(f)+(g))</i>	9,101	8,605	3,600	
(2)	No. of cases with actions completed <i>(b)</i>	30,408	30,910	13,843	
(3)	Percentage of cases with investigation completed over the total number of cases with actions completed <i>((c)= <math>\frac{(a)}{(b)} \times 100\%</math>)</i>	30%	28%	26%	
(4)	Time taken to complete cases (no. of working days)	≤90 <i>(d)</i>	2,862 (31%) <sup>Δ</sup>	2,638 (31%) <sup>Δ</sup>	1,686 (47%) <sup>Δ</sup>
(5)		91-180 <i>(e)</i>	2,904 (32%) <sup>Δ</sup>	2,450 (28%) <sup>Δ</sup>	866 (24%) <sup>Δ</sup>
(6)		181-270 <i>(f)</i>	2,128 (23%) <sup>Δ</sup>	2,127 (25%) <sup>Δ</sup>	695 (19%) <sup>Δ</sup>
(7)		≥271 <i>(g)</i>	1,207 (13%) <sup>Δ</sup>	1,390 (16%) <sup>Δ</sup>	353 (10%) <sup>Δ</sup>

<sup>Δ</sup> *Figures in brackets represent the percentages of cases concerned over total numbers of cases with investigation completed (row (1))*

**4.8** JO stated that it had not analysed the reasons for taking prolonged time to complete actions for certain cases or compiled relevant statistics because cases vary in complexity. For complicated cases that involve more than one source of water seepage, or where water seepage reappeared or was intermittent, investigators would have to conduct different, continual or repeated tests and monitoring. Such cases would take longer time to complete the required tests and need the full cooperation of the owners/occupants concerned, hence longer overall processing time. Processing time would even be longer when the owners/occupants concerned are uncooperative

because JO would then have to apply for a Warrant of Entry from the court in accordance with the requirements and procedures set out in the PHMSO before its staff can enter the premises to conduct investigation and tests. Since cases differ in actual circumstance, the source of water seepage, the area or the room involved, the owners/occupants' willingness to cooperate, the appointment time and the difficulties encountered in the process, JO could not categorise the reasons for taking prolonged time to complete certain cases or compile relevant statistics.

## **EMPLOYING NEW TESTING TECHNOLOGIES TO IDENTIFY THE SOURCE OF WATER SEEPAGE**

**4.9** Since 2013, JO has been engaging consultants to employ infrared thermography and microwave tomography to investigate, trace and analyse the source of water seepage in serious or complicated water seepage cases which involve, for example, prolonged water seepage with persistently higher moisture content detected, deterioration of the affected area by prolonged water seepage, water seepage reoccurring despite repeated investigations having been completed and conventional testing methods having failed to identify the source of water seepage.

**4.10** Infrared thermography and microwave tomography may prove ineffective under some circumstances, for example, when cases involve ceilings with concrete spalling, the area of the affected area being too small, blockage of pipes or other facilities, or ceilings with tile finishes. JO, therefore, has to assess the environment at the scene before deciding whether these testing methods can be used.

### ***Consultancy Study***

**4.11** To improve the effectiveness of water seepage investigation, JO has commissioned a consultancy study at the end of 2014 ("consultancy study") to review the new testing technologies for identifying the source of water seepage in buildings. The study also assessed and recommended the most suitable testing methods for use in private buildings, and formulated technical guidelines for JO. The study was completed at the end of 2018.

**4.12** The consultancy study report recommended that JO employ new testing technologies for Stage III investigations. Such technologies include infrared thermography, microwave tomography, micro-spectroscopy inspection, radar scanning

and static pressure test (collectively called “new testing technologies”). The physical appearance of the equipment used in these new testing technologies are shown in **Figure 2**. The basic principles of these testing technologies are outlined below.

- (1) Infrared thermography: an infrared instrument is used to detect and measure the change in and difference between the surface temperature of slabs/walls. The higher the moisture content of slabs/walls, the lower the surface temperature would be. The location and size of the affected area can thus be determined.
- (2) Microwave tomography: a microwave probe is used to measure the moisture data reflected from different depth ranges of concrete slabs. By analysing the data collected at different locations and depths, and taking into consideration the circumstances at the scene including the locations of water supply and drainage facilities of the suspected premises as well as the location and size of the affected area, the path and source(s) of water seepage can then be deduced.
- (3) Material analysis by microspectroscopy inspection: material identification techniques of infrared, ultraviolet and mass spectroscopy are employed to ascertain the presence of colour dyes used in colour water tests in the plaster samples collected at the affected area, thereby confirming the result of the colour water test. This method is more sensitive than the conventional chemical analysis of plaster samples.
- (4) Radar scanning survey: a radar instrument is used to detect the different reflective signals to electromagnetic waves emitted by different materials embedded in concrete structures, thereby determining the location and distribution of the water supply/drainage pipes or related facilities concealed in slabs or walls. This can help analyse the results generated by other water seepage tests and identify the source of water seepage.
- (5) Static pressure test: a pressure gauge is used to monitor the change in pressure inside water supply pipes. Whether water seepage is caused by leakage of water supply pipes can then be determined.

**Figure 2: Equipment of  
new testing technologies employed by JO  
(Source: JO)**



Infrared thermographic imager



Microwave device



Material analysis by  
microspectroscopy inspection  
equipment



Radar scanning survey equipment



Pressure gauge

## ***Using New Testing Technologies for Investigation at “Pilot Districts”***

**4.13** In June 2018, JO started using the new testing technologies for Stage III investigations in three “pilot districts” (namely Kowloon City, Wan Chai, Central and Western). The new testing technologies employed were mainly infrared thermography and microwave tomography. If the affected premises satisfies the requirements of the tests, JO would use the new testing technologies instead of the ponding test and water spray test to identify the source of water seepage. If the site environment is not suitable, ponding test and water spray test would still be used. As at September 2019, the “pilot districts” had been expanded to include Sham Shui Po, Kwai Tsing, Tuen Mun, Tai Po and the North District.

**4.14** In districts other than the “pilot districts”, JO would continue to use infrared thermography and microwave tomography for investigating the relatively complicated water seepage cases (see **para. 4.9**).

**4.15** Results of JO’s use of the new testing technologies to identify the source of water seepage between 2018 and June 2020 are shown in **Table 7**.

**Table 7: Results of JO’s use of the new testing technologies\* to identify the source of water seepage**

<b>Year</b>	<b>No. of cases with test and analysis completed ((a)= (b)+(c))</b>	<b>No. of cases with source of water seepage identified (b)</b>	<b>No. of cases with source of water seepage unidentified (c)</b>	<b>Ratio of cases with source of water seepage identified ((d) = <math>\frac{(b)}{(a)}</math> x100%))</b>	<b>Ratio of cases with source of water seepage unidentified ((e) = <math>\frac{(c)}{(a)}</math> x100%))</b>
2018	92	72	20	78%	22%
2019	620	473	147	76%	24%
2020 (As at June 2020)	950	736	214	77%	23%

\* Only cases with infrared thermography and microwave tomography used are included.

**4.16** Table 8 shows the results of JO’s adoption of the new testing technologies and conventional colour water test in Stage III investigations between June 2018 and June 2020 to identify the source of water seepage in the “pilot districts”.

**Table 8: Results of JO’s adoption of the new testing technologies\* and conventional colour water test@ in Stage III investigations to identify the source of water seepage in “pilot districts” #**

Year	Testing method	No. of cases with test and analysis completed $((a)=(b)+(c))$	No. of cases with source of water seepage identified $(b)$	No. of cases with source of water seepage unidentified $(c)$	Ratio of cases with source of water seepage identified $((d)=\frac{(b)}{(a)} \times 100\%)$	Ratio of cases with source of water seepage unidentified $((e)=\frac{(c)}{(a)} \times 100\%)$
2018 (since June)	New technologies	56	47	9	84%	16%
	Conventional colour water test	176	68	108	39%	61%
2019	New technologies	534	413	121	77%	23%
	Conventional colour water test	426	193	233	45%	55%
2020 (as at June)	New technologies	893	694	199	78%	22%
	Conventional colour water test	262	114	148	44%	56%

# Since June 2018, the “pilot districts” have included Kowloon City, Wan Chai, Central and Western. In September 2019, the “pilot districts” were expanded to include Sham Shui Po, Kwai Tsing, Tuen Mun, Tai Po and the North District.

\* Only cases with infrared thermography and microwave tomography used are included.

@ Only cases with ponding test and water spray test used are included.

## ENFORCEMENT

### *Issuance and Compliance of Notices*

**4.17** Once the source of water seepage causing environmental nuisance is identified, JO may issue a Notice to the person concerned, demanding repairs and abatement of the nuisance within the period specified in the Notice. Failure to comply is an offence (see **para. 2.3 (3)**).

**4.18** **Table 9** shows the number of Notices issued by JO between 2017 and June 2020 upon identification of the source of water seepage and whether the Notices had been complied with.

**Table 9: Issuance and Compliance of Notices**

	Year	No. of Notices issued (a)	Notices in (a) complied with upon expiry		Notices in (a) not complied with upon expiry	
			No. (b)	Compliance rate (%) $((c) = \frac{(b)}{(a)} \times 100\%)$	No. (d)	Non-compliance rate (%) $((e) = \frac{(d)}{(a)} \times 100\%)$
(1)	2017	5,006	4,903	98%	103	2%
(2)	2018	5,110	5,007	98%	103	2%
(3)	2019	4,941	4,826	98%	115	2%
(4)	2020 (as at June)	3,197*	2,986	93%	93	3%

\* Including 118 Notices which had not expired. The sum of columns (b) and (d) in row (4), therefore, does not reconcile with column (a).

### *Actions against Owners Failing to Comply with a Notice*

**4.19** Any person failing to comply with a Notice is liable to a maximum fine of \$10,000 and a daily fine of \$200; while failing to comply with an Order is liable to a maximum fine of \$25,000 and a daily fine of \$450 (see **para. 2.3 (7)**).

**4.20** **Table 10** shows the number of Notices issued by JO between 2017 and June 2020 which had expired but were not yet complied with, as well as FEHD’s prosecutions against the owners concerned and its applications for an Order from the court.

**Table 10: FEHD’s prosecutions against owners non-compliant with Notices and its applications for an Order from the court**

JO’s follow up actions		No.	
(1)	No. of Notices issued between 2017 and June 2020 which had expired	18,136	
(2)	No. of Notices in row (1) which had expired but yet to be complied with	414	
(3)	Prosecutions against owners with respect to cases in row (2)	No. of prosecutions	414
(4)		No. of convictions	350 <sup>#</sup>
(5)		No. of Notices complied with upon conviction of owner	191
(6)		No. of Notices not complied with upon conviction of owner	159
(7)	Applications for an Order from the court with respect to cases in row (6)	No. of applications	159
(8)		No. of applications granted	158
(9)		No. of Notices complied with upon receipt of Order by owner	136 <sup>*</sup>
(10)		No. of Notices not complied with upon receipt of Order by owner	13
(11)	No. of prosecutions with respect to cases in row (10)	No. of prosecutions	13
(12)		No. of convictions	12 <sup>^@</sup>

<sup>#</sup> *The fine upon conviction ranged from \$500 to \$6,000.*

<sup>\*</sup> *Another nine Orders had not yet expired.*

<sup>^</sup> *One Order is yet to be scheduled for hearing.*

<sup>@</sup> *The fine upon conviction ranged from \$1,600 to \$10,000.*

# 5

## *CASE STUDIES*

**5.1** According to JO's operational guidelines, JO can usually complete its investigation into a case and notify the informant of the findings within 90 working days if the case is straightforward and the owner/occupant concerned is cooperative (see **para. 2.5**). For complicated cases or cases where the owner/occupant concerned is not cooperative, JO usually takes prolonged time to complete the investigation (see **para. 4.8**).

**5.2** This Office has received from time to time complaints against JO for failing to duly follow up on water seepage reports (see **para. 1.3**). The following six cases reflect the inadequacies of JO's follow-up on water seepage reports.

### **CASE (1): JO TOOK 17 MONTHS TO ENTER THE SUSPECTED PREMISES FOR FURTHER INVESTIGATION**

**5.3** In January 2016, Ms M reported to JO water seepage on the walls of her flat, which was on the mezzanine floor of a commercial cum residential building.

**5.4** Within the month, JO visited the suspected premises ("Flat A") for Stage II investigation, but could not find the source of water seepage. In February, JO assigned a consultant to conduct Stage III investigation. Between April 2016 and January 2017, JO and its consultant paid a number of visits to Flat A, but each time they failed to gain entry. During the period, JO had issued the Notice of Appointment, NOIE and NOIA to Flat A. In May 2017, JO obtained the Warrant of Entry. In June 2017, which was 17 months after the completion of Stage II investigation, JO successfully entered Flat M to conduct tests.

**CASE (2): THE CONSULTANT FAILED TO ACTIVATE THE APPLICATION PROCEDURES FOR THE WARRANT OF ENTRY IN A TIMELY MANNER, AND JO FAILED TO VET THE INVESTIGATION REPORT PROMPTLY**

**5.5** In February 2017, Mr N reported to JO water seepage at the ceiling of the balcony of his residential flat.

**5.6** Later in July, JO assigned its consultant to conduct Stage III investigation. Between July and October, JO and its consultant had called the owner of the flat above (“Flat B”) Mr N’s many times as well as paying visits to the flat to schedule a test but the owner concerned could not be reached. In November, JO wrote to Mr N, informing him that it would consider activating the application procedures for the Warrant of Entry in order to enter Flat B for investigation. In December, which was five months after the commencement of Stage III investigation, the consultant finally gained entry to Flat B for investigation.

**5.7** In January 2018, the consultant submitted the investigation report to JO. Two months later in March 2018, JO vetted the report and concluded that water seepage was caused by the poorly maintained waterproofing materials of the bathroom’s floor slab of Flat B. In April, JO issued a Notice to the owner of Flat B.

**CASE (3): THE CONSULTANT FAILED TO SUBMIT THE INVESTIGATION REPORT ON TIME, AND JO FAILED TO KEEP THE INFORMANT POSTED IN A TIMELY MANNER**

**5.8** In March 2018, Mr O reported to JO water seepage at the ceiling of the kitchen of his residential flat.

**5.9** Between October and December, JO’s consultant visited the suspected premises (“Flat C”) for Stage III investigation and Mr O’s flat for checking the test results. It was found that the seepage was caused by the poorly maintained waterproofing materials of the floor slab of the bathroom in Flat C. Three months later in March 2019, having been urged repeatedly by JO, the consultant submitted its investigation report. Earlier, in February 2019, Mr O asked JO about the investigation progress and JO only responded to him on the day the consultant submitted the investigation report.

**CASE (4): THE CONSULTANT FAILED TO SUBMIT THE SUPPLEMENTARY REPORT REGARDING CONFIRMATORY TESTS ON TIME, AND JO FAILED TO KEEP THE INFORMANT POSTED IN A TIMELY MANNER**

**5.10** In May 2018, Mr P reported to JO water seepage at the ceiling of the kitchen of his residential flat. Within the month, JO conducted Stage I investigation at his flat and found water seepage at the ceiling of the balcony.

**5.11** The results of Stage III investigation revealed that the shower cubicle at the bathroom of the flat above (“Flat D”) Mr P’s was the source of water seepage. Therefore, JO issued a Notice to the owner of Flat D. During the compliance check, JO found persistent water seepage at the ceiling of the balcony of Mr P’s flat. In April 2019, JO and its consultant conducted confirmatory tests at Flat D. In May, the consultant submitted the investigation report to JO. In July, Mr P told JO he found at the ceiling of his balcony colour water believed to be used in the confirmatory tests. The consultant then visited Mr P’s flat for rechecking the test results. Five months later in December 2019, upon repeated reminders from JO, the consultant eventually submitted to JO the supplementary report regarding the confirmatory tests. In January 2020, JO informed Mr P of the confirmatory test results in writing.

**CASE (5): THE CONSULTANT FAILED TO KEEP INVESTIGATION INFORMATION PROPERLY**

**5.12** In May 2019, Mr Q heard from JO that the flat below his (“Flat E”) filed a report on his flat being the source of water seepage. In October, the consultant conducted Stage III investigation at Mr Q’s flat. In January and March 2020, the consultant contacted Mr Q for entry to his flat again for investigation because the failure of its computer had caused the electronic files containing the investigation information inaccessible. In April, as the consultant managed to read the relevant electronic files, there was no need to visit Mr Q’s flat again for investigation.

## **CASE (6): THE CONSULTANT HAD TO MAKE MULTIPLE CORRECTIONS TO THE INVESTIGATION REPORT**

**5.13** In January 2019, Ms R reported to JO water seepage caused by the flat above (“Flat F”) hers.

**5.14** In August, the consultant conducted Stage III investigation at Ms R’s flat. Subsequent to the consultant’s submission of the investigation report, JO asked the consultant a number of times to amend the report as it contained errors. Seven months later in March 2020, JO informed Ms R in writing that the source of water seepage was Flat F according to the amended investigation report and that JO would issue a Notice to the owner of that flat.

# 6

## *REVIEW TASK FORCE ESTABLISHED TO REVIEW THE OPERATION OF JO*

**6.1** In February 2018, FEHD set up a task force (“JO Task Force”) to review comprehensively the operation of JO. In May, a task force comprising representatives from the Food and Health Bureau, the Development Bureau, FEHD (its representatives were mainly from the JO Task Force), BD and WSD (“Review Task Force”) was formed to kick-start a review with a view to further improving the handling of water seepage cases, streamlining work procedures and following up on the improvement measures recommended by the Audit Commission in its 2016 Report. The review was still in progress as at November 2020 and is expected to be completed with the relevant report accomplished by the end of 2021.

**6.2** As at November 2020, the Review Task Force had made some interim recommendations for improving the handling of water seepage cases. The justifications for and implementation progress of those recommendations are as follows:

(1) Setting up RJOs

Four RJOs should be set up on Hong Kong Island, in Kowloon and the New Territories East and West so that JO staff could work in the same office with a view to strengthening communication between JO(FEHD) and JO(BD) staff and enhancing overall work efficiency. The Hong Kong RJO, Kowloon RJO and New Territories West RJO commenced operation in January, June and October 2020 respectively. The New Territories East RJO is expected to commence operation in mid-2021.

- (2) WSD's early involvement in investigation of water seepage reports relating to continuous water dripping

Reports of continuous water dripping at a steady rate are often related to leakage of fresh water mains. As such, the Review Task Force implemented a pilot scheme in December 2019, which was due for completion in June 2020. Under the pilot scheme, water seepage reports involving continuous water dripping at a steady rate would be handled by WSD and JO in parallel so that the source of water seepage could be identified as soon as possible. While the Scheme was still in progress, the Review Task Force extended it until November 2020 and suggested that JO should first ascertain whether there was continuous water dripping at a steady rate before referring a case to WSD for follow-up. Upon completion of the pilot scheme, JO and WSD would further discuss the feasibility of regularising the referral.

- (3) Improve the WSCMS and publish performance results regularly

JO is improving the WSCMS and preparing management returns regularly to enable more effective monitoring of the follow-up action on water seepage cases and record the time spent on completing the cases. After collecting and processing relevant data, JO plans to formulate performance indicators for straightforward cases and publish the performance results regularly.

- (4) Setting up a customer service team

The Review Task Force plans to set up a customer service team in JO. The key service areas will include assisting both parties involved in the dispute over inter-floor water seepage and suggesting means of dispute resolution subject to the case merits so as to resolve water seepage problems more effectively. Besides, the Team will be responsible for public education on water seepage in buildings. The Team is expected to be in service by mid-2021 when the New Territories East RJO comes into operation.

(5) Streamlining work procedures

The Review Task Force has conducted a comprehensive review on the work procedures of different stages of investigation to eliminate unnecessary procedures and simplify tedious ones. The measures implemented include standardising the methods and specifications of tests in various investigation stages in accordance with the technical guidelines laid down in the consultancy study (see **para. 4.11**), streamlining the application procedures for the Warrant of Entry, devising templates of necessary court documents for reference and rationalising file movement between JO(FEHD) and JO(BD) staff, etc.

# 7

## *PUBLIC VIEWS*

### **PUBLIC VIEWS RECEIVED**

**7.1** During our investigation, we received a total of 50 submissions of public views (see **para. 1.5(1)**), among which some consider the colour water tests used by JO to identify the source of water seepage outdated and that JO's investigation has been ineffective despite its lengthiness. There are also views that the threshold of investigation set by JO to substantiate the presence of water seepage too high (i.e. the moisture content of the affected area must be at 35% or above) and JO's monitoring of its consultants has been ineffective.

**7.2** Apart from the above, we also received the following views during our investigation:

- (1) under the PHMSO, JO(BD) staff are authorised to conduct investigation into water seepage cases and take enforcement action accordingly. Nevertheless, after identifying the source of water seepage in Stage III investigation, they will pass the cases to JO(FEHD) staff for issuance of Notices and institution of prosecutions. Such practice lacks efficiency;
- (2) the absence of a lead department in JO has not only affected the effectiveness of its operation but also caused disputes among staff of different professional backgrounds. Hence, a lead department should be appointed to manage and lead the operation of JO;
- (3) in some cases, water seepage is caused by leakage of fresh water mains. Therefore, the composition of JO should include WSD; and

- (4) BD is not forthcoming in light of the seepage cases involving unauthorised building works (“UBWs”) as referred to its headquarters by JO(BD) and simply requests owners of unauthorised subdivided flats, which cause water seepage, to resolve the seepage problem instead of eradicating the UBWs.

## **JO’S RESPONSE**

**7.3** Upon our request, JO responded to the foregoing public views in paragraphs 7.2(1) to (4) above, as follows:

### ***View (1): JO(FEHD) Staff to Issue Notices and Institute Prosecutions During Stage III Investigation***

**7.4** JO’s work arrangements are mutually agreed upon by FEHD and BD (see **para. 2.2**), and the two departments have established clear demarcation of responsibilities to enhance work efficiency. In the financial year 2019/20, the establishment of JO(FEHD) consisted of 236 investigation and liaison officers while there were 82 professional and technical officers in JO(BD). The establishments are set according to the existing division of labour between the two departments regarding investigation and enforcement.

**7.5** Both JO(FEHD) and JO(BD) staff are authorised by the Director of Food and Environmental Hygiene to handle water seepage cases, which include issuing Notices in accordance with the PHMSO. However, under the PHMSO, JO(BD) staff are not authorised to institute prosecutions against non-compliance of Notices or Orders, which is not within the ambit and professional arena of JO(BD) staff. Prosecutions are instituted by FEHD’s Prosecution Section (which is not within the composition of JO).

**7.6** As regards the feasibility of having JO(BD) staff issue Notices during Stage III investigation and institute prosecutions, and the impact of such practice on JO’s operation, JO explained that subject to Schedule 3 to the PHMSO, the Director of Food and Environmental Hygiene is the Authority responsible for issuing Notices under section 127 of the PHMSO (see **para. 2.3(3)**), requiring the relevant persons to make necessary repairs to abate the environmental nuisance as well as instituting prosecutions. FEHD staff are responsible for executing the PHMSO and instituting prosecutions, and FEHD has been allocated manpower for the workload accordingly.

7.7 Should the work delegated to FEHD staff under the PHMSO be handed over to JO(BD) staff, it would add extra burden to JO(BD) staff, reduce the efficiency of Stage III investigation, compromise the effectiveness of enforcement and consistency of execution of the Ordinance. Therefore, such arrangement would not conduce to effective use of manpower. The prevailing division of labour within JO is the best arrangement as it can fully utilise the expertise of staff from both departments and maximise synergy in handling water seepage investigation and enforcement. In fact, the prevailing arrangement of work and division of labour are mutually agreed upon by the two departments according to the objective of forming JO and on reasonable grounds.

***View (2): There Should be A Lead Department in JO***

7.8 For better communication between JO(FEHD) and JO(BD) staff and enhancing the overall efficiency of JO, four RJOs have been/will be set up on Hong Kong Island, in Kowloon, and the New Territories East and West so that JO staff from the two departments could work in the same office. Based on the experience of Hong Kong RJO established in January 2020, JO reckoned that setting up RJOs can enhance the efficiency of handling water seepage reports in the following ways:

- (1) housing under one roof FEHD and BD staff responsible for handling water seepage reports for the same region can facilitate communication among them, sharing of resources and consistency in the operation of JO;
- (2) the FEHD's Superintendent and BD's Senior Professional Officer stationed in the same JO office can supervise their subordinates direct to maintain close monitoring of work progress, and give more effective and prompt instructions on handling complicated cases;
- (3) JO staff of different ranks from the two departments can discuss investigations and follow-up actions of cases direct for the benefit of quick understanding of case details and follow-up arrangements; where necessary, they can seek clarification on details of different investigation stages and deliberate complicated cases for solutions so as to enhance work efficiency; and

- (4) despatch of general files between the two departments can be shortened from five to one or two working days.

***View (3): Inclusion of WSD in the Setup of JO***

**7.9** In 2017, 2018 and 2019, JO respectively referred to WSD 496, 613 and 514 water seepage cases suspected to be caused by leakage of fresh water mains for follow-up action. Pursuant to the Waterworks Ordinance, WSD will take enforcement action against any proven case of wasting fresh water and require the occupant concerned to make repairs and rectify the problem. When the pilot scheme recommended by the Review Task Force (see **para. 6.2(2)**) completes, JO and WSD will further discuss the feasibility of regularising the referral of water seepage reports involving continuous dripping at a steady rate to WSD.

***View (4): Handling Water Seepage Caused by UBWs***

**7.10** In handling water seepage cases where the source of seepage is suspected to be actionable UBWs, JO will refer them to BD staff not accommodated in JO for necessary follow-up actions in accordance with the Buildings Ordinance and the prevailing enforcement policy targeted at UBWs. Whether the UBWs involved are subject to removal, enforcement should be taken immediately against water seepage in accordance with the PHMSO so as to abate the environmental nuisance. Otherwise, it would be difficult to explain to the occupant suffering from water seepage caused by UBWs. Besides, removal of UBWs could not resolve the environmental nuisance caused by water seepage originating from defective waterproofing materials. It is BD's established practice to adopt a risk-based approach for prioritisation of enforcement actions against UBWs. Specifically, BD will issue a removal order against actionable UBWs in accordance with the prevailing enforcement policy on UBWs and require the owner concerned to remove them. Upon receiving reports about UBWs or referrals from other departments including JO, BD will follow up on the cases in accordance with the Buildings Ordinance and the prevailing enforcement policy, which include issuing a statutory order to the owner of actionable UBWs to require rectification and bring charge against the owner failing to comply with the statutory order.

# 8

## *COMMENTS AND RECOMMENDATIONS*

### **PREFACE**

**8.1** Based on the Government’s policy decision, JO was established to handle water seepage reports (see **para. 2.1**). Each year, JO handles a considerable number of water seepage cases (see **column (c)** of **Table 3** under **para. 4.1**). For complicated cases or cases where the owner/occupant concerned is not cooperative (see **para. 4.8**), JO may need prolonged time to complete the investigation. As JO’s investigation involves a number of tests, it may cause inconvenience to the owner/occupant concerned. Where the source of water seepage cannot be identified for various reasons, it may even result in complaints against JO. We acknowledge the difficulties facing JO in identifying the source of water seepage causing environmental hygiene nuisance through quick and effectual completion of investigations.

**8.2** In view of our findings, we have the following comments on the effectiveness of JO’s follow-up actions on water seepage reports.

### **EFFECTIVENESS OF COMPLAINT HANDLING**

**8.3** We notice that the backlog of cases is mainly attributed to the considerable number of water seepage reports that JO receives each year (see **column (a)** of **Table 3** under **para. 4.1**). Other reasons include ineffectiveness on the part of JO and its consultants (see **para. 8.7**); JO’s failure to examine thoroughly why it took prolonged time to complete some cases (see **paras. 8.10 and 8.11**) and make improvement accordingly; and ineffective monitoring of its consultants (see **paras. 8.21 and 8.22**).

## ***(I) Huge Backlog of Cases***

**8.4** In 2018 and 2019, JO received more cases than it completed (excluding the outstanding cases carried forward from the previous year), the difference being 3,812 in 2018 and 3,145 in 2019 (see **rows (1)–(2)** of **Table 3** under **para. 4.1**), which shows a huge backlog of cases. As at June 2020, JO had 23,403 active cases, 8,437 cases of which were received in or before 2019 (see **para. 4.4**). In our view, JO should proactively examine the reasons for having backlog and take effective action to clear it. The Government should consider allocating more resources to JO, if necessary, so that JO can clear the backlog as early as possible.

## ***(II) Many Cases Require More Than 90 Working Days to Complete Investigation***

**8.5** Normally, JO can complete its investigation into a case and notify the informant of the findings within 90 working days if the case is straightforward and the owner/occupant concerned is cooperative (see **para. 2.5**).

**8.6** Take 2019, in which JO completed its action in 30,910 cases (see **column (y)** in **row (3)** of **Table 5** under **para. 4.7**), as an example, 19,689 (64%) of those 30,910 cases were completed within 90 working days (see **column (y)** in **row (5)** of **Table 5**) while the remaining 11,221 cases (36%) required more than 90 working days to complete (see **column (y)** in **rows (6)–(8)** of **Table 5**), with 6,020 cases (19%) requiring more than two times the aforesaid processing time (see **column (y)** in **rows (7) and (8)** of **Table 5**). In 2019, JO completed 8,605 cases that required investigation (see **column (y)** in **row (1)** of **Table 6** under **para. 4.7**), of which 2,638 cases (31%) were completed within 90 working days (see **column (y)** in **rows (4)** of **Table 6**) and the remaining 5,967 cases (69%) required more than 90 working days to complete (see **column (y)** in **rows (5)–(7)** of **Table 6**), with 3,517 cases (41%) requiring more than two times the aforesaid processing time (see **column (y)** in **rows (6) and (7)** of **Table 6**). These statistical figures show that many cases required more than 90 working days to complete actions and it was also common to complete investigations beyond 90 working days.

**8.7** In Cases (1) to (4), there were delays on the part of JO and/or its consultants with follow-up actions taken more than 90 working days to complete. In Case (1), it took JO 17 months after Stage II investigation to enter the suspected premises to initiate Stage III investigation (see **para. 5.4**). In Case (2), it took the consultant five months

to enter the suspected premises for investigation (see **para. 5.6**) and JO two months to vet the consultant's investigation report (see **para. 5.7**). In Case (3), the consultant submitted its investigation report three months after checking the test results (see **para. 5.9**). In Case (4), the consultant submitted the supplementary report to JO five months after it had completed checking the confirmatory test results (see **para. 5.11**).

**8.8** Both this Office and the Audit Commission had pointed out in the investigation reports on JO published in 2008 and 2016 respectively that JO's investigation of cases was too lengthy, hence improvement of service was necessary. Take 2019 as an example, JO took more than 90 working days to complete actions in 11,221 cases (36% of the cases where actions were completed that year) and complete investigations in 5,967 cases (69% of the cases where investigations were completed that year) (see **para. 8.6**). Those cases accounted for a large proportion of cases in 2019. Currently, JO has no indicators regarding the processing time of prolonged cases (i.e. more than 90 working days). We consider that JO should explore devising practicable reference/performance indicators, examine thoroughly the reasons why some cases required prolonged time to complete actions and formulate improvement measures (see **paras. 8.10 and 8.11**). If consultants are found to have repeatedly delayed handling case assignment, JO should review the effectiveness of its mechanism for monitoring consultants.

**8.9** Moreover, we notice that consultants are required to visit suspected premises for investigation within 20 working days upon case assignment by JO (see **Fig. 1** under **para. 2.5**). We understand that the owner/occupant of the suspected premises may not be willing to allow entry of consultants into their premises for investigation. Under such circumstances, the investigation period will inevitably be extended. Consultants should, therefore, make good use of time and commence investigation as soon as possible. We recommend that JO review its workflow and explore the feasibility of shortening the lead time for consultants to visit suspected premises upon case assignment so as to expedite case processing.

### ***(III) Failure to Analyse the Reasons for Prolonged Time (More Than 90 Working Days) to Complete Actions and Compile Relevant Statistics***

**8.10** JO has a huge backlog of cases (see **para. 8.4**). Many cases required more than 90 working days to complete actions and it was also common to complete investigations beyond 90 working days (see **para. 8.6**). On compilation of relevant data and analysis of reasons for prolonged processing time, JO explained that the

complexity of a case and whether interested parties are cooperative determine how much time would be needed for handling the case. While complicated cases usually require more time to process, uncooperative owners/occupants will further extend the investigation period. As cases differ in complexity, JO could not categorise the reasons for taking prolonged time to complete actions for some cases, hence no compilation of relevant statistics (see **para. 4.8**).

**8.11** Given the huge number of cases to be handled (see **column (c)** in **rows (1)–(3)** of **Table 3** under **para. 4.1**), we find it necessary for JO to compile relevant statistics to ascertain systematically the various reasons for its taking prolonged time to complete actions so as to formulate coping strategies. We understand that as at November 2020 the work of the Review Task Force was still in progress (see **para. 6.1**) and some streamlining measures have been put in place, including standardising the methods and specifications of tests in various stages of investigation and streamlining the application procedures for the Warrant of Entry (see **para. 6.2(5)**). We recommend that JO, based on its accumulated experience, devise a case management strategy to enhance the efficiency of handling water seepage reports.

***(IV) Operational Guidelines Should Be Revised to Require That Staff Call the Owner/Occupant Concerned to Arrange First Visit to Suspected Premises***

**8.12** We notice that there is no requirement in JO(FEHD)’s operational guidelines that staff should call the owner/occupant of the suspected premises to arrange the first visit. As a result, they may not be able to gain entry for investigation. We recommend that JO revise the relevant guidelines to specify that staff may call the owner/occupant concerned to arrange the first visit if the informant has provided, among others, his/her contact telephone number for better use of investigation resources.

***(V) Failure to Update Informants Regularly on Investigation Progress during Stage III Investigation and When Conducting Confirmatory Tests***

**8.13** In cases where difficulty is encountered during investigation, JO will update the informants on the progress of investigation every 30 calendar days during Stage II investigation. Prior to September 2019, JO would not update the informants regularly on the progress of investigation during Stage III investigation (see **para. 2.8**). From September 2019 onwards, JO has required its consultants to update the informants on the progress in writing within 20 to 35 working days after visiting the affected premises if they encountered any difficulty during investigation (see **para. 2.8**). However, such

arrangement is only one-time, and the consultants will not write to the informants with updates again in case of further delays.

**8.14** We learn that JO has planned to revise the terms of contracts offered to its consultants from the first quarter of 2021 to stipulate that if the consultant cannot visit the suspected premises within 20 working days upon case assignment, it should update the informant in writing on the progress and explain the reasons for not initiating the investigation within this period of 20 working days. If the situation persists, the consultant should update the informant on the progress every 20 working days (see **para. 2.8**). We recommend that before introducing this arrangement, JO regularly update the informant on the progress of cases where the consultant has written to the informant and delay continues. For a case requiring confirmatory tests, JO should also update the informant in writing regularly so as to keep the latter abreast of the case progress.

***(VI) Explore Simplification of Investigation Reports to Expedite Completion of Stage III Investigation***

**8.15** According to the information that JO provided to the Legislative Council, between 2017 and October 2019, there were totally 291 cases where prosecution was instituted against owners/occupants for non-compliance with Notices or Orders, which means there were about 100 such cases on average each year. Nevertheless, the consultants submitted as many as 10,000 investigation reports to JO each year between 2017 and 2019. In other words, only a small fraction of those 10,000 or so reports were produced to the Court. We understand that investigation reports are crucial to water seepage cases and JO should not issue a Notice unless there has been sufficient evidence. However, JO should also consider how to optimise resource utilisation. In this regard, we recommend that JO seek advice from the Department of Justice (“DoJ”) and explore the feasibility of simplifying investigation reports without compromising its enforcement actions and prosecutions. For example, upon completion of investigation, the consultants may just submit a simple report, of which the content will suffice to decide whether a Notice should be issued, and compile a detailed report when prosecution is to be instituted. In that case, resources can be better utilised and Stage III investigation can be expedited.

## EFFECTIVENESS OF USE OF NEW TESTING TECHNOLOGIES

### *(VII) Higher Success Rate of New Testing Technologies in Identifying Source of Water Seepage*

**8.16** Between 2018 and June 2020, by using new testing technologies (including infrared thermographic test and microwave tomography), JO could more often identify the source of water seepage than failing to do so (see **columns (b) and (c) in rows (1)–(3) of Table 7** under **para. 4.15**), with the success rates of 78%, 76% and 77% in 2018, 2019 and 2020 (as at June) achieved respectively (see **column (d) in rows (1)–(3) of Table 7**). Meanwhile, on application of new testing technologies in pilot districts between 2018 and June 2020, JO’s success rate in identifying the source of water seepage was 45%, 32% and 34% higher than that of the conventional colour water tests in 2018, 2019 and 2020 (as at June) respectively (see **column (d) in rows (1)–(6) of Table 8** under **para. 4.16**). The above data show that the new testing technologies are more effective than the conventional colour water tests in identifying the source of water seepage. Moreover, compared with the conventional colour water tests that take time for the colour water to penetrate through the concrete and plaster gaps, the new testing technologies enable the investigator’s instant data collection, thereby enhancing the efficiency of water seepage investigation.

**8.17** As at November 2020, JO applied the new testing technologies to identify the source of water seepage in Stage III investigation in eight pilot districts (see **para. 4.13**). As the new testing technologies are obviously more effective in identifying the source of water seepage (see **para. 8.16**), we recommend that JO proactively consider extending the current use of the new technologies in the eight pilot districts to the other districts. Where it is suitable to use the new testing technologies at the premises in question, JO can use them to identify the source of water seepage in more cases.

## EFFECTIVENESS OF MONITORING

### *(VIII) Failure to Use the WSCMS to Compile Statistics and Management Reports Though the System Had Been in Place for More Than Two-and-A-Half Years*

**8.18** The WSCMS can compile data on the time required for completing different investigation stages and actions (see **para. 2.12**), which are crucial in monitoring the

work of JO's staff and consultants. Since the WSCMS has been in place since March 2018, we find it difficult to understand why JO could not complete data entry and check the information of cases handled between 2018 and June 2020, test the function and accuracy of the WSCMS in compiling statistics and management returns, and start preparing management reports regularly (see **para. 2.13**) until November 2020. We urge JO to learn from experience to avoid reoccurrence of the same situation.

### ***(IX) Ineffective Monitoring of Consultants***

**8.19** Both the investigation reports published by this Office in 2008 and the Audit Commission in 2016 pointed out JO's ineffective monitoring of its consultants.

**8.20** In December 2020, BD explained to this Office that JO(BD) had all along followed the established mechanism for monitoring and managing the performance of consultants. In managing and checking the consultants' investigation progress, BD would take a series of actions against consultants with unsatisfactory performance which include issuing reminders, warnings and adverse performance appraisal reports in a timely manner and suspending the consultants' eligibility for bidding for similar service contracts in case of persistent underperformance. These actions aim to urge for improvement and expedite investigations (see **paras. 3.3–3.9**).

**8.21** The inadequacies of consultants identified in Cases (2) to (6) include failure to activate early the application procedures for the Warrant of Entry (Case (2)) (see **para. 5.6**), late submission of investigation reports (Cases (3) and (4)) (see **paras. 5.9 and 5.11**), failure to keep properly investigation information (Case (5)) (see **para. 5.12**) and having to make multiple corrections to investigation report (Case (6)) (see **para. 5.14**). In Cases (3) and (4), the consultants submitted their respective investigation report (see **para. 5.9**) and supplementary report regarding confirmatory tests (see **para. 5.11**) only after JO's repeated reminders. These cases show that although their investigation came under JO's monitoring, the consultants did not take further actions until JO had repeatedly urged them to do so, indicating JO's feeble monitoring of the consultants.

**8.22** Though the consultants concerned eventually rectified their mistakes or implemented remedial measures in above cases, the investigations had been delayed, causing inconvenience to the owners/occupants concerned. In December 2020, JO revealed to this Office that it had strengthened its monitoring of consultants, but the implementation of the relevant measures was greatly affected by the COVID-19 pandemic.

**8.23** On the other hand, we notice from a case that the consultant had received warning letters and consecutively two adverse performance appraisal reports from JO for poor performance, including delays in initiating investigation and submitting the investigation report despite JO's repeated reminders. The consultant was subsequently debarred from the tender for providing consultancy service for BD for three months only. The deterrent effect of the penalty was doubtful and its effectiveness in improving the consultant's performance, too. According to JO, the penalty clause came from the contract terms formulated by the Government. Therefore, we recommend that JO(BD) explore with its policy bureau enhancing penalty for consultants with poor performance so as to enhance deterrent effect.

***(X) Devising Reference/Performance Indicators***

**8.24** We are pleased to note that JO intends to follow up on the Review Task Force's recommendation by formulating practicable performance indicators for straightforward cases, and publishing regularly its outcomes of performance (see **para. 6.2(3)**). We recommend that JO devise practicable reference/performance indicators for complicated cases as well so that the public will be informed of, and its staff will abide by, such indicators, and JO will have benchmarks for internal monitoring, thereby avoiding prolonged investigation and slow progress.

**OTHER ASPECTS**

***(XI) Moisture-content Threshold for Initiating Investigations***

**8.25** Among the public views we received, some consider the threshold of investigation set by JO to substantiate the presence of water seepage too high (see **para. 7.1**). JO explained that concrete and the surface of plaster are susceptible to the relative humidity of the surroundings. Based on its experience in handling water seepage cases and relevant data, it is difficult to identify the source of water seepage if the moisture content of concrete and the surface of plaster is below 35%. Hence, JO has set the moisture-content threshold at 35% or above to ensure effective use of resources (see **Note\*** in **Fig. 1** under **para. 2.5**). We refrain from commenting on JO's threshold of investigation regarding moisture content because this is its professional judgement.

***(XII) Issuing Notices and Instituting Prosecutions during Stage III Investigation***

**8.26** Regarding the public view that the practices of having JO(FEHD) staff issue Notices according to the results of Stage III investigation and instituting prosecutions against owners failing to comply with the Notices are inefficient (see **para. 7.2(1)**), we are of the view that the nuisance caused by water seepage is essentially related to environmental hygiene. As FEHD is the department enforcing the PHMSO, it is not unreasonable for its staff to take up these two tasks. What members of the public are most concerned about is the efficiency of enforcement action rather than which department should undertake these tasks. In our opinion, JO should review the existing arrangements and consider whether they are fit for purpose. If not, it should look into the underlying causes and improve the arrangements.

***(XIII) Appoint a Lead Department to Coordinate and Monitor JO's Operations and Establish a "Case Manager" System***

**8.27** JO's work arrangements are mutually agreed upon by FEHD and BD, and the two departments also jointly oversee the management, operations and performance of JO (see **para. 2.2**). This may cause the enforcement responsibilities to split up. We learn from the public views that some JO staff consider the division of labour between the two departments unreasonable (see **para. 7.2(1)**) while others find that the absence of a lead department has caused conflicts and disputes among staff of different professional backgrounds (see **para. 7.2(2)**). We are concerned that staff from FEHD and BD who are in different professional fields may work in silos and lack coordination and determination to resolve problems in the absence of a coherent management structure overseeing JO's operation. The investigation reports published by this Office in 2008 and the Audit Commission published in 2016 respectively presented similar observations on the inadequacies in JO's handling of water seepage reports such as prolonged investigation and ineffective monitoring of consultants (see **paras. 8.8 and 8.19**). In other words, these problems have persisted for years. Hence, JO should have a lead department coordinate and monitor its operations and account for its performance.

**8.28** While we agree that the setting up of RJOs (see **para. 6.2(1)**) has helped improve communication between JO(FEHD) and JO(BD) staff, such arrangement is insufficient for tackling the above problems. We recommend that JO promptly explore and confirm the designation of a lead department to coordinate and monitor JO's

operations, and that the heads of RJOs will oversee all aspects in their respective RJOs including work arrangements, personnel management, monitoring of overall progress of handling water seepage reports and case management. In case of disputes among staff, the heads of RJOs will exercise judgement and promptly resolve the disputes. Although we agree that the current work arrangement of JO could achieve synergy between the two departments, we consider appointing a lead department a viable means to maximise the synergy between the two departments, given the public's expectation of resolving water seepage problems early and JO's prolonged structural problems.

**8.29** Moreover, we notice that currently JO does not have a "case manager" system. JO(FEHD) staff are not required to further monitor the progress of a case after referring it to JO(BD) for Stage III investigation. We believe that establishing a "case manager" system would facilitate close monitoring of case progress and provide members of the public with a single contact point to enquire about case progress. A case manager should follow through the entire cycle of case processing until its conclusion. Where the enquiry of an informant is beyond the expertise of a case manager, the case manager may arrange the relevant staff member to handle it. By division of labour, it should not be difficult to make such arrangement.

**8.30** Basically the Government's intervention in water seepage problems is to deal with hygiene nuisance and safeguard public health. We are aware that the review conducted by the Review Task Force is still in progress (see **para. 6.1**). We recommend that JO proactively consider appointing a lead department and establishing a "case manager" system, and putting forward this recommendation to the Review Task Force for consideration.

#### ***(XIV) Whether Composition of JO Should Include WSD***

**8.31** As regards the view on including WSD in the composition of JO (see **para. 7.2(3)**), we reckon that the establishment of JO is to identify the source of water seepage causing nuisance and to take corresponding enforcement action (see **para. 2.1**). Normally, water leaked from fresh water mains does not constitute environmental hygiene nuisance as it is not unclean. It is, therefore, justifiable not to include WSD in the composition of JO. For members of the public, nuisance arising from water seepage at the ceiling will always be disturbing regardless of the source of seepage being fresh water or otherwise, and they certainly have a reasonable expectation that JO would resolve the problem for them. In fact, every year JO refers to WSD for follow-up several hundred water seepage cases allegedly caused by leakage of fresh water mains

(see **para. 7.9**). We consider it more important to have WSD's early involvement than having the Department itself included in the composition of JO. We are pleased to note that JO will consult with WSD about regularising the referral of water seepage reports involving continuous dripping at a steady rate to it for early intervention (see **para. 6(2)**).

#### ***(XV) Handling Water Seepage Caused by UBWs***

**8.32** There are views that BD lacks initiative in handling cases referred to its headquarters by JO(BD) staff, which involve water seepage caused by UBWs, and simply requests the owners of premises with unauthorised subdivided flats causing water seepage to resolve the seepage problem instead of eradicating the UBWs (see **para. 7.2(4)**). In our opinion, it is BD's professional judgement on whether the UBWs have caused the water seepage and whether the UBWs should be eradicated, hence we will not comment on this. As to whether the owner concerned should handle the problem of water seepage or UBWs first, our view is that if the UBWs in question fall into the priority categories of actionable cases, BD should issue a removal order to demand the owner concerned to eradicate the structures. Otherwise, JO should issue a Notice to the owner concerned to resolve the environmental hygiene nuisance caused by water seepage and BD should take enforcement action against the UBWs in accordance with its enforcement priorities.

#### ***(XVI) Resolving Water Seepage Disputes by Way of Mediation***

**8.33** We notice that among those cases where actions were completed between 2018 and June 2020, JO discontinued its follow-up in around 14% to 17% of them during investigation each year either because water seepage had stopped or the informant had withdrawn the report (see **columns (a)–(c) of row (4) of Table 4** under **para. 4.2**). Conceivably it is possible that in some cases water seepage stopped because the owner/occupant of the premises causing water seepage made the necessary repairs after JO's intervention.

**8.34** It is not necessary to rely on JO's enforcement action alone as water seepage may indeed be resolved through negotiation between the owners concerned, if the necessary repairs are performed proactively. Otherwise, the water seepage problem may drag on even after JO has taken enforcement action. We are pleased to note that JO is planning to set up a customer service team to assist both parties in a dispute over inter-floor water seepage and suggesting possible means of dispute resolution subject to

the case merits so as to resolve water seepage problems more effectively (see **para. 6.2(4)**). We recommend that JO, with reference to the Free Mediation Service Scheme for Building Management offered by the Home Affairs Department, consider introducing mediation services to help owners find win-win solutions for disputes over water seepage, improve communication and mend fences.

## RECOMMENDATIONS

**8.35** In light of the above, The Ombudsman has made the following recommendations to JO:

- (1) proactively identify causes of and devise strategies to clear the backlog. Where necessary, the Government should consider allocating more resources to JO (see **para. 8.4**);
- (2) review and improve its workflow: explore shortening the time frame for consultants' visits to the suspected premises upon case assignment (see **para. 8.9**); call the owner/occupant of the suspected premises to arrange the first visit where possible (see **para. 8.12**); update the informant on the case progress regularly (see **para. 8.14**); and review whether the practice of having FEHD staff issue the Notice according to the results of Stage III investigation and institute prosecutions against owners are the best way to achieve the aim (see **para. 8.26**);
- (3) explore, in consultation with DoJ, the feasibility of simplifying investigation reports without compromising its enforcement actions (see **para. 8.15**);
- (4) explore the setting up of a mechanism for finding the reasons for prolonged time (more than 90 working days) needed to complete actions and compiling statistics so as to devise a case management strategy to enhance the efficiency of handling water seepage reports (see **para. 8.11**), and devise practicable reference/performance indicators for handling complicated cases (see **para. 8.24**);
- (5) proactively consider extending the initiative of using new testing technologies in the pilot districts to other districts for identifying the

source of water seepage (see **para. 8.17**);

- (6) JO(BD) to step up monitoring of its consultants (see **paras. 8.21 and 8.22**), and discuss with its bureau on enhancing penalty for consultants with poor performance (see **para. 8.23**);
- (7) proactively consider restructuring its setup so as to put itself under a lead department and establishing a “case manager” system (see **paras. 8.27–8.30**); and
- (8) implement as early as possible the interim recommendations made by the Review Task Force formed by the relevant bureaux and departments, including setting up the New Territories East RJO as planned, discussing with WSD the regularisation of JO’s referral of water seepage reports, enhancing the WSCMS and publishing its performance results regularly, setting up a customer service team and streamlining work procedures (see **para. 6.2(1)–(5)**), and explore introducing mediation service to resolve disputes over water seepage (see **para. 8.34**).

## **ACKNOWLEDGEMENTS**

**8.36** The Ombudsman would like to thank JO for its full cooperation during this investigation and members of the public who have submitted their views.

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