For discussion on 23 August 2021

# LEGISLATIVE COUNCIL PANEL ON ENVIRONMENTAL AFFAIRS

Ameliorating Noise Problems in Public Places and Domestic Premises and Wider Use of Innovative Technologies to Manage Environmental Noise

### **PURPOSE**

This paper aims to brief Members on the existing legislation and management practices in controlling noise nuisance caused by shop keepers crying their wares in public places and noise from domestic premises, as well as the application of innovative technologies to improve the efficiency of handling complaints about noise by the Environmental Protection Department (EPD).

#### NOISE FROM PUBLIC PLACES AND DOMESTIC PREMISES

- 2. Noise in everyday life refers to the noise generated from day-to-day activities and it is a common issue among many other parts of the world. The situation is especially common in Hong Kong given its dense population and intense economic activities. For example, some stores have used loudspeakers to draw customers' attention, resulting in street cries and noise nuisance, leading to complaints from the public. When more than one shop crying for their wares, they compete by making louder cries to attract customers, thus further aggravating the problem.
- 3. For domestic noise, most complaints are against noise generated from the indoor activities of neighbours living in upper or adjacent flats. These noise sources could be from television or hi-fi, karaoke, musical instruments or piano, mahjong, children playing or running around, objects hitting the floor, moving furniture, dogs or other pets, as well as poorly maintained air conditioners. People generally find such noise particularly annoying during nighttime.

#### LEGISLATION IN CONTROLLING NOISE IN EVERYDAY LIFE

- 4. Comparing with road traffic or mechanical noise, noise in everyday life are more diverse in nature. Noise level is not the only factor determining whether annoyance is caused, given that the receiver would be affected by other factors such as the reason for emitting the noise, its nature, time of occurrence, location, and the circumstances of the situation. Moreover, the nature of noise in everyday life is part of everyday life, and the rationality and necessity of its generation must also be an important consideration when taking enforcement The noise level alone cannot be used to determine whether annoyance is Therefore, to determine whether annoyance is caused by the noise, the caused. mainstream practice of the other governments is to adopt "a reasonable person test" to determine whether a noise causes any annoyance, i.e. considering the reason, nature, volume, place, time of occurrence, and situation, whether the noise is so loud and unreasonable under the circumstances and considered unacceptable and intolerable by "a reasonable person". Adopting "a reasonable person test" as an assessment criterion is a mature practice that has a long history with abundant case law in many places around the globe.
- 5. Like other places, Hong Kong has adopted "a reasonable person test" to manage noise in everyday life. Prior to 1989, the Summary Offences Ordinance (Cap. 228) required that noise from public places and domestic premises would not cause annoyance to other people. As these types of noise in everyday life are usually short-lived, irregular, mobile, and may often involve complex neighbourhood relations, the above provisions were enforced by the police. When the Noise Control Ordinance (Cap. 400) (the Ordinance) was brought into force in 1989, it absorbed the relevant sections of the Summary Offences Ordinance into sections 4 and 5 of the Ordinance, and continued to be enforced by the police.
- 6. In determining whether a noise causes annoyance, law courts in Hong Kong will use common sense to assess whether the situation in a case involves circumstances that are intolerable to "a reasonable person" based on the evidence of the case. Enforcement personnel will also make reference to the interpretation of annoyance and relevant judgments, having regard to objective factors ranging from the level and characteristics of the noise, its time of occurrence, its persistency and frequency, the background noise level, and the circumstances

nearby, with a view to striking a sensible balance between protecting members of the public from unreasonable noise annoyance and not disrupting their daily lives.

#### NOISE FROM PUBLIC PLACES

- 7. Generally, the police are responsible for taking enforcement actions in relation to noise emanated from mobile hawkers and activities in public places, where the EPD will provide professional advice when necessary. The EPD is responsible for taking enforcement actions in relation to noise emanated from fixed shops, like noise caused by street cries from shops, and the police will provide assistance if there are difficulties in law enforcement. Taking street cries from shops as an example, the EPD will deploy its staff to carry out on-site investigation upon receipt of a complaint. Noise assessment will be conducted if it is considered that the street cries involved may cause annoyance to the nearby residents, shops, or pedestrians. The prosecution will be instituted against the shop if it is confirmed that the street cries did cause annoyance. shopkeeper will be urged to lower the volume of such cries as far as possible to avoid causing annoyance to others. For a shop with repeated contraventions, its director may also be criminally liable under section 28A of the Ordinance for the offence once the shop is convicted, to strengthening the deterrent effect.
- 8. 2017 and 2018 recorded an increase in the number of complaints about noise nuisance caused by street cries from shops. The locations of particular public concern included Yeung Uk Road Market and San Tsuen Street in Tsuen Wan, the junctions of Ap Liu Street with Kweilin Street and with Pei Ho Street in Sham Shui Po, Hop Choi Street and Yuen Long New Street in Yuen Long, and Shamchun Street in Mong Kok. To address the deteriorating situation of street cries from shops, the EPD has not only enhanced its inspection efforts (from about 450 inspections in 2016 to around 650 inspections in 2017 and over 1 200 inspections each year thereafter) but also enhanced the training and guidelines on noise assessment for its frontline enforcement staff, where more cases of noise annoyance caused by street cries from shops as well as relevant court judgments and case precedents were included to help these staff assess more clearly and easily whether such street cries would cause annoyance to people under various circumstances. For the above locations of particular public concern alone, a total of 410 inspections were conducted in 2017 and 2018, and joint operations were also carried out from time to time with 17 successful prosecutions. EPD's enhanced inspection efforts and enforcement actions, noise problems of

street cries from shops at the abovementioned locations have improved considerably. For example, the number of complaints about street cries from shops at the locations in Yuen Long recorded a significant drop from 15 cases in 2017 to 1 case in the first half of 2021, while that of Shamchun Street in Mong Kok fell from 24 cases in 2018 to 2 cases in the first half of 2021.

- 9. As some cases are related to street management issues such as unauthorised extension of business area and obstruction of walkway/carriageway, the EPD also collaborates with the Food and Environmental Hygiene Department, Hong Kong Police Force and relevant departments to conduct joint operations against unauthorised extension of business area in public places, with a view to minimising the impact of street cries from shops on the nearby residents or shops and hence the noise annoyance caused to members of the public. Between 2018 and 2020, the EPD conducted 4 150 inspections and 38 joint operations on street cries from shops, and there were 86 cases of successful prosecution, including 14 prosecutions against shop directors, with a total fine of \$440,000. found that most shops will reduce their noise after being reminded or prosecuted. However, when new shops emerge and begin street crying, other shops may also rush in to compete to attract customers' attraction by emitting louder noise, causing repetition of complaints from nearby residents. Therefore, from 2018 to 2020, the total number of complaints about noise from street cries remains at about 400 per year.
- 10. The EPD will continue to closely monitor the situation of noise annoyance caused by street cries from shops, intensify inspections and enforcement actions, as well as continue with the education and publicity efforts. These include, during inspections, explaining the related law requirements to new shops, and reminding shop keepers to pay attention to the volume of their loudspeakers. The shop keepers will also be reminded to use fewer, lower rated power loudspeakers and install or place them facing downwards as far as possible, within their shops.

#### NOISE FROM DOMESTIC PREMISES

11. For domestic noise, complaints are mainly against noise generated from the indoor activities of neighbours living in upper or adjacent flats. These noise sources include television or hi-fi, karaoke, musical instruments or piano, mahjong, children playing or running around, objects hitting the floor, moving furniture, and dogs or other pets. When a resident is affected by noise that

cannot be resolved and requires assistance, the most effective way is to seek assistance from their property management. Management office can liaise directly with relevant parties to resolve the issue promptly. If the problems remain unresolved or difficulties arose, assistance from the police may be sought. These can be complicated cases that cannot be resolved among the neighbours. When the police arrive at the scene after receiving a complaint, the noise producer will generally stop or reduce the noise, but in many cases, the noise may recur, and in some isolated cases, relationships between neighbours may worsen, or even become hostile to each other.

- 12. Emission of noise is inevitable during day-to-day activities at home. nature of domestic noise is part of everyday life. Law enforcement can only cure the symptoms, not the root cause of such problems. To most people, the presence of property management or law enforcement officers are to remind noise producers to be self-disciplined. However, in many cases, the intervention of a third party, especially law enforcement officers, may worsen the relationship between neighbours and even become hostile to each other, leading to more complicated and serious issues. Lack of communication may be one of the root problems. For instance, the occupants downstairs may be particularly sensitive to noise such as the noise of children playing, while the occupants upstairs cannot fully agree with the feeling of the occupants downstairs. In fact, there are practical difficulties in prohibiting children from playing. The key to solving these noise problems in domestic premises relies much on the mutual respect among neighbours and their harmonious relations. Good neighbourliness can only be achieved if everyone is willing to exercise self-discipline and be considerate to avoid causing noise nuisance to others.
- 13. The EPD has recently prepared a set of guidelines on reducing noise in domestic premises via its webpages and social media pages, to enhance public awareness of noise in everyday life and educate the public on the ways to avoid making noise nuisance. This helps build a harmonious community. To reach more people in the community, we are planning a series of talks and webinars to be held in the second half of this year to brief property management companies, relevant residents' associations and owners' committees on the issues of noise from domestic premises and how to deal with such noise. Posters will also be distributed to publicise the message of less noise for a more harmonious community. Besides, promotion video will be produced and broadcasted through various mass media channels for public education. We will keep in view

the development of this issue and review the effectiveness of the relevant approaches.

## USE OF INNOVATIVE TECHNOLOGIES TO ENHANCE THE EFFICIENCY OF HANDLING COMPLAINTS ABOUT NOISE

- 14. When handling noise complaints from the public, the EPD often has difficulties in locating the source of the noise under complaint due to the complexity of the environment and the presence of multiple noise sources. staff will have to inspect each and every noise source and the process can be timeconsuming. Recently, the EPD has made better use of innovative technologies to facilitate investigations by introducing portable acoustic cameras. taking a normal picture, an investigator can simply point the acoustic camera towards the location of the suspected noise source. The noise levels of each noise source within the view of the acoustic camera will be measured and displayed instantly, in different colours. Investigators can thus "see" and identifying the nosiest noise source, improving the efficiency in identifying noise In one of the cases regarding a complaint against noise from sources. commercial and industrial premises, it was found that the complainant was living in a flat with windows facing the central air-conditioning systems of several buildings, ventilation exhausts of restaurants, an electricity substation, as well as the ventilation system of a public transport interchange. As none of the noise sources appeared to be particularly loud, the location of the noise source under complaint could not be immediately identified. The investigators then used the acoustic camera and its display showed coloured images indicating that the exhaust outlets of the ventilation system of one of the restaurants were of the The noise source under complaint was preliminarily higher noise level. identified and later confirmed upon further investigation.
- 15. In addition, the EPD has recently supported the Hong Kong Applied Science and Technology Research Institute, in collaboration with two local universities, to develop an artificial intelligence noise monitoring and identification system under the Innovation and Technology Fund for initial application in monitoring the noise levels of powered mechanical equipment used in construction sites. It is hoped that the system can be further developed for application in identifying and monitoring the levels of general environmental noise. For example, by monitoring the noise generated during the operation of building services equipment, the noise of a damaged motor or mechanical breakdown can be automatically identified based on their noise characteristics, so

that property management may arrange for the repair and maintenance of the equipment in a timely manner and reduce unnecessary noise nuisance caused by machine failure, thereby enhancing the effectiveness of noise management, control, and law enforcement.

**Environment Bureau Environmental Protection Department August 2021**