



Consultation Paper

Proposed Amendments to the Noise Control Ordinance (Cap. 400) for Control over Domestic Renovation Noise

December 2023



**Environment and
Ecology Bureau**

The Government of the
Hong Kong Special Administrative Region
of the People's Republic of China



環境保護署

Environmental Protection Department



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Consultation Paper

Proposal on Imposing Control over Domestic Renovation Noise and Introducing a Fixed Penalty System

Chapter 1 Introduction

Purpose

- 1.1** The Chief Executive proposed in the 2022 Policy Address to amend the Noise Control Ordinance (NCO) to put control over domestic renovation noise and introduce a fixed penalty system to effectively control and remediate associated noise problems so as to mitigate environmental nuisance. A new regulation is being drafted to tighten up the control over domestic renovation noise. This Consultation Paper invites comments from all sectors of the community on the proposal put forward by the Government.

Current situation of domestic renovation

- 1.2** Noise arising from domestic renovation during daytime is not subject to the provisions of the NCO. The NCO only regulates the use of powered mechanical equipment during nighttime and general holidays¹.

¹ Under Section 6(1) of the NCO, any construction works (including renovation works) involving the use of powered mechanical equipment during the restricted hours, i.e. between 7 p.m. and 7 a.m. or at any time on Sunday or a general holiday, is prohibited unless a valid Construction Noise Permit (CNP) is in force and the conditions stipulated therein are complied with. To allow residents of domestic premises to perform minor installation or maintenance works, such as installation of wall decorations or equipment, Section 6(6) of the NCO provides exemption for the owners, tenants or occupiers of domestic premises so that they themselves, though without a valid CNP, may carry out the works in their premises by using one item of portable powered mechanical equipment

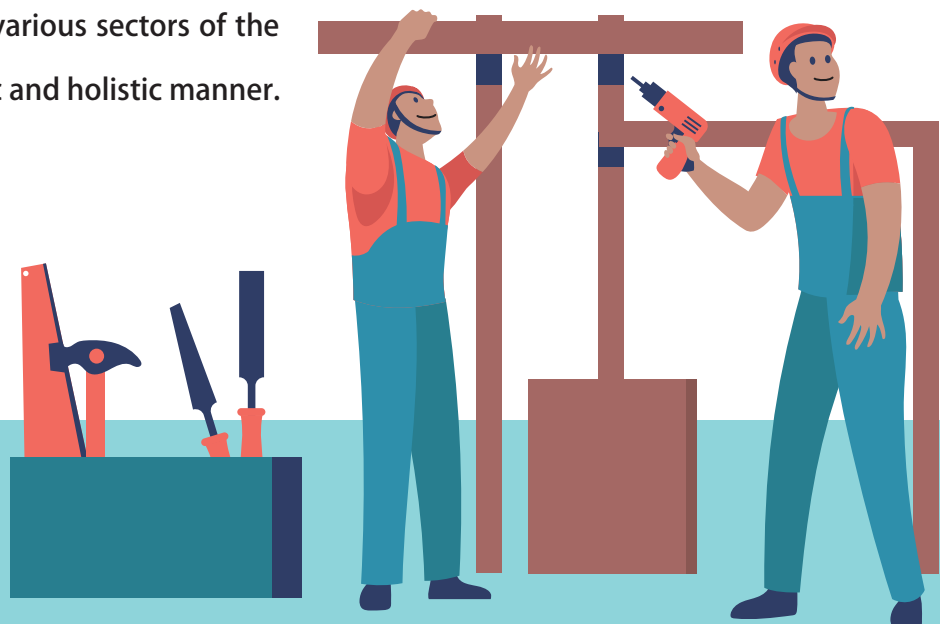
1.3 Domestic renovation is very common in Hong Kong. It is estimated that as many as 200 000 residential units undergo domestic renovation each year. Most of our citizens live in compact high-rise buildings and noise nuisance from domestic renovation of various scales is almost inevitable. According to a large-scale public survey conducted by the Environmental Protection Department (EPD) in 2018, it is estimated that more than one million citizens have been distressed by domestic renovation noise within the past year . Noise can lead to irritation and mental stress. It can also affect the quality of life and interfere with daily activities such as rest and sleep.

1.4 The common use of percussive equipment for demolition works during domestic renovation generates excessive structure-borne noise, which can cause a maximum noise level exceeding 80 dB(A) at nearby households. One of the main causes for extreme annoyance is the use of percussive breakers and percussive drills for renovation procedures, such as demolition of walls for layout alteration, removal of tiles during refurbishment of kitchen and bathroom, grooving for laying or anchoring pipes and cable conduits, as well as drilling. It is common for renovation workers to use medium to heavy-sized percussive breakers to carry out these procedures. The excessive noise and dust generated cause nuisance to many residents and pose health hazard to renovation workers.

1.5 In view of the above, we need to control the noise at source and shorten the operation time of percussive breakers and percussive drills, so that the structure-borne noise can be reduced and the impact of excessive and intermittent renovation noise on nearby residents can be mitigated. Meanwhile, it is necessary to ensure that renovation works can be completed within a reasonable period of time in order to strike a balance between the two and address the aspirations of different sectors of the community.

1.6 Having consolidated the above considerations, we informed the Panel on Environmental Affairs (EA Panel) of the Legislative Council (LegCo) on 27 February 2023² on our latest strategies and progress in addressing domestic renovation noise and sought Members' views on the proposed tightened legislative control over domestic renovation noise. Members generally supported our proposal and hoped that we would consult the trade and the general public. To better assess the technical feasibility of the proposed control and its impact on the trade, the EPD has commissioned a consultant to conduct on site testing in different types and floor areas of residential units and carry out various renovation procedures under the framework of the proposed control to examine its impact. We have also consulted various stakeholders and relevant professional bodies, such as associations of renovation practitioners, property management companies and importers of renovation equipment, on the proposed control, so as to better account for the operational circumstances of the trade as well as the trade practices and possible difficulties involved with a view to identifying a feasible proposal that can balance the interests of different stakeholders.

1.7 Subsequent to our briefing for the LegCo EA Panel on 27 February 2023², we further liaised with the trade and collected many valuable views from them. After consolidating the views of the trade and the stakeholders, we now put forward the following proposal for public consultation, so as to gather more views to further refine the proposed control to cater for the needs of various sectors of the community in a pragmatic and holistic manner.



² LC Paper No. CB(1)131/2023(03)

Chapter 2 Key Measures under the Proposal

2.1 We propose to introduce a new regulation to be made by the Secretary for Environment and Ecology as authorised under Section 27(1) of the NCO to effect the operation of Section 7 “Noise from construction work contrary to regulations” of the NCO to control the use of percussive breakers and percussive drills in domestic renovation works. Renovation procedures involving the use of percussive breakers and percussive drills mainly include demolition, breaking and grooving. For the use of percussive breakers, prior notification will be required with restrictions on the days and hours of operation. For the use of percussive drills, prior notification will not be required but there will be restrictions on the hours of operation. Upon commencement of the new regulation, any person who carries out, or causes or permits to be carried out, domestic renovation works contrary to the regulation commits an offence. Most renovation procedures, such as plastering, joinery, painting and installation of equipment, will not be affected by the new regulation, which means prior notification will not be required and there will be no restrictions on the days and hours of operation.

Scope of control

2.2 The proposed scope of control covers:

- (i) any part of a unit or the entire unit that is used for residential³ purposes as specified in the land grant conditions, occupation permits or approved building plans;

but does not cover:

- (ii) houses⁴, shops, offices, hotels, hostels, quarters in non-residential facilities or vacant residential buildings, etc.;
- (iii) external walls, roofs, windows, curtain walls and installation of wall decorations or domestic equipment in the unit, such as hanging frames, lighting fixtures and furniture.

³ For residential buildings or composite commercial/residential buildings, “domestic premises” means a unit that is constructed or intended for residential purposes, regardless of whether the unit is still being occupied for residential or commercial purposes during its renovation.

⁴ For the purpose of this proposed amendments, “houses” means the domestic premises which is not structurally connected to other domestic premises (i.e. premises occupied by other owner(s) or occupant(s))

2.3 The proposed control only applies to the domestic renovation works inside the domestic premises. In other words, works involving maintenance of external walls and public places of buildings, or commercial parts in composite commercial/ residential buildings, buildings or village houses in which all units are of the same occupier) are not subject to the new regulation, but they are still subject to the existing provisions under Section 6 of the NCO.

Defence to proceedings

2.4 It shall be a defence to show that the circumstances constituting or leading to contravening the regulation arise in pursuance of the purpose of the prevention of injury to any person or the saving of the life of any person, or in pursuance of the purpose of the prevention of damage to property where the circumstances placing the property in danger of being damaged could not reasonably have been foreseen by the person charged with the offence (e.g. urgent repair of bursting freshwater pipes).



Proposed control

Option 1

2.5 Under the initial proposal submitted to the LegCo EA Panel on 27 February 2023 (hereafter referred as "Option 1"), we proposed:

- (i) to prohibit the use of percussive breakers with a mass of above 10 kilograms (kg);
- (ii) to prohibit the use of percussive breakers and percussive drills on Saturdays, Sundays and general holidays;

Percussive breakers

- (iii) to introduce a notification system to control the use of percussive breakers with a mass of 10 kg or below for renovation works, under which prior notification and a fee of \$500 per notification will be required. The purposes of imposing a fee are to cover the cost incurred by the operation and maintenance of the notification system, as well as to encourage the trade to formulate appropriate work plans in advance for noisy and annoying procedures in particular. The first notification will be valid for two months, during which percussive breakers can only be used for at most 5 working days⁵. Subsequent notifications will be valid for one month, during which percussive breakers will be allowed to operate for 2 consecutive working days;
- (iv) to restrict the use of percussive breakers with a mass of 10 kg or below to between 9 a.m. and 6 p.m. on working days permitted under the aforesaid notification system;

Percussive drills

- (v) to allow the use of percussive drills without the need to give any notification during the specific period (between 11 a.m. and 2 p.m. on days other than Saturdays, Sundays and general holidays), or to allow the use of percussive drills between 9 a.m. and 6 p.m. on dates specified in the notification in conjunction with the use of percussive breakers.

⁵ "working days" means days other than Saturdays, Sundays and general holidays."

2.6 Option 1 imposes restrictions on the use of percussive breakers to 5 working days and the use of percussive drills to 3 hours each day. The trade will need to formulate work plans in advance, make appropriate adjustments to their operational procedures and use quiet equipment outside the restricted period to minimise the noise impact.

Option 2

2.7 The renovation trade considers Option 2 more in line with their current operational procedures. In fact, the trade can shorten the operation time of using percussive breakers and percussive drills for demolition of walls, removal of tiles, grooving and drilling as far as practicable. Option 2 proposes:

- (i) to prohibit the use of percussive breakers with a mass of above 10 kg;
- (ii) to prohibit the use of percussive breakers and percussive drills on Saturdays, Sundays and general holidays;

Percussive breakers

- (iii) to introduce a notification system to control the use of percussive breakers with a mass of 10 kg or below for renovation works, under which prior notification and a fee of \$100 will be required. The first notification will be valid for two months, during which percussive breakers can be used for a total of 8 working days. Subsequent notifications will be valid for one month, during which percussive breakers will be allowed to operate for 2 consecutive working days;
- (iv) to restrict the use of percussive breakers with a mass of 10 kg or below between 10 a.m. and 5 p.m. on working days permitted under the aforesaid notification system;

Percussive drills

- (v) to allow the use of percussive drills without the need to give any notification between 10 a.m. and 5 p.m. on days other than Saturdays, Sundays and general holidays days.

Notification system

- 2.8** Property owners and renovation contractors may, depending on the circumstances, negotiate and decide which party should be responsible for the notification. We encourage the trade to formulate work plans in advance and follow the plans in their renovation works to minimise changes of the notified schedules, so that nearby residents can make proper arrangements to reduce the impact of noise on their lives. To allow sufficient time for nearby residents to make appropriate arrangements in response to the works schedule of using percussive breakers, notification or changes should be made at least 3 working days prior to the works. After consultation with the trade, given that a certain degree of flexibility is necessary for arranging renovation procedures, no fees will be charged for changes for the first two times, but further changes will be subject to a relevant payment each time. Any fees for changes due to Red/Black Rainstorm Warning Signal or Typhoon Signal No. 8 or above will be waived.
- 2.9** The notification can be made through an automated online system where applicants can submit the required information, including personal particulars, the address of premises under renovation and the works schedule of using percussive breakers. Upon completion of the notification process, the applicant should download the notice detailing the works schedule from the system. Such notice should be displayed at prominent locations outside the domestic premises for easy inspection by affected residents, property management personnel or enforcement officers.
- 2.10** Please refer to Annex I for the comparison between Option 1 and Option 2 .

Proposed workflow

2.11 The above notification system not only enables the property management and the affected households to make appropriate arrangements in advance, but also facilitates owners and contractors to conduct meticulous planning in respect of the workflow before commencing the renovation works, so as to complete the procedures involving the use of percussive breakers within the proposed restricted hours. Both Option 1 and Option 2 have allowed sufficient time for the renovation contractors to complete the procedures using percussive breakers or percussive drills. Most of the other renovation procedures such as plastering, joinery, painting and installation of equipment will remain unaffected under the new regulation.

Pilot Scheme on Quiet Renovation

2.12 In 2021, the EPD launched a two-year Pilot Scheme on Quiet Renovation (the Pilot Scheme) with the aim of formulating good house rules and providing technical support through property management, thereby nurturing the culture of quiet renovation. The Pilot Scheme promotes quiet renovation via various initiatives, one of which is the compilation of the “Guidelines on Managing Quiet Renovation” to assist property management bodies in developing their own “House Rules for Quiet Renovation”. The EPD has recently conducted a questionnaire for about 40 000 flats in a number of housing estates. All the housing estates have drawn up house rules for renovation. Among them, over 70% of the property management companies are aware of the Pilot Scheme launched by the EPD.

2.13 We encourage the trade to use non-percussive quiet renovation equipment to carry out renovation works. Annex II sets out the recommended quiet renovation equipment. There are various non-percussive quiet renovation equipment that can readily replace the said conventional percussive tools. Quiet equipment such as chasers, handheld coring machines and direct fastening machines, available in the market suitable for various renovation procedures, serving similar purposes by adopting hydraulic, rotary, incision or anchoring techniques that are not only quieter in nature but also effective in considerably reducing structure-borne noise. For certain renovation activities where the use of percussive equipment is inevitable, such as the removal of tiles with extra hard surface, we recommend the use of lighter percussive breaker with flat chisel. The current market has different suppliers on relevant quiet equipment.

2.14 Moreover, these non-percussive renovation equipment can be equipped with wet or dry dust suppression accessory and can achieve almost zero dust emission, thereby significantly improving the working and neighbouring environments during renovation and safeguarding occupational health of renovation workers, such as prevention of hearing loss caused by prolonged exposure to noisy working environment and respiratory diseases caused by prolonged inhalation of dust.

2.15 In terms of price, except for handheld hydraulic concrete crushers, quiet renovation tools are generally available at several thousand dollars or more. The prices will fall as the equipment gains popularity. Moreover, such equipment can normally be used for years and its cost is minimal when compared to the cost of general renovation works.

Penalty

2.16 Any person (including property owner or renovation contractor) who fails to comply with the above regulation constitutes an offence. We suggest setting up a fixed penalty system to handle malpractices on site and to enhance enforcement efficiency. We propose to set the penalty at a fine of Level 3 (i.e. \$10,000)*. We expect that the proposed control will substantially reduce the excessive and intermittent noise nuisance caused by renovation works to nearby residents.

* Pursuant to the Noise Control Ordinance, domestic renovation noise is also construction noise. In addition to the above fixed penalty, we propose to adjust the maximum fines in the proposed amendments on Noise Control Ordinance (Cap 400) in August this year. If convicted in court, the person may be fined \$180,000 on first conviction, \$360,000 for the second or subsequent convictions, and \$35,000 for each day during which the offense continues.



Chapter 3 Views Sought

3.1 We will earnestly listen and collect the views of various sectors of the community before finalising the control proposal. We expect that the bill on the new regulation can be introduced into the LegCo next year at the earliest, with the goal of implementation in early 2025. However, a six-month grace period is proposed to be granted before enforcement.

3.2 Please fill in the Response Form (Annex III) and send it to the EPD on or before 17 February 2024 by post, fax, email or e-form:

Mail: Assessment and Noise Group
Environmental Protection Department
26th floor, Southorn Centre,
130 Hennessy Road,
Wan Chai, Hong Kong
(Re: Consultation on Control over Domestic Renovation Noise)

Fax: 2802 4511

E-mail: nco_review@epd.gov.hk

3.3 Please note that the Government may, either in discussion with others or in any subsequent report, whether privately or publicly, refer to and attribute views submitted in response to this consultation document. Any request to treat all or part of a response in confidence will be respected, but if no such request is made, it will be assumed that the response is not intended to be confidential.







Assessment and Noise Group
Environmental Assessment Division
Environmental Protection Department
Environment and Ecology Bureau
December 2023



Comparison between Option 1 and Option 2

Option 1	Option 2	Remarks
Prohibit the use of percussive breakers over 10 kg	Prohibit the use of percussive breakers over 10 kg	Remain unchanged
Prohibit the use of percussive breakers and percussive drills on Saturdays, Sundays and general holidays	Prohibit the use of percussive breakers and percussive drills on Saturdays, Sundays and general holidays	Remain unchanged
<p>Control of percussive breakers: Notification system (9 a.m. to 6 p.m.):</p> <ul style="list-style-type: none"> Percussive breakers can only be used for at most 5 working days in the first two months Subsequent notifications will be valid for one month, during which percussive breakers will be allowed to operate for 2 consecutive working days. 	<p>Notification system (10 a.m. to 5 p.m.):</p> <ul style="list-style-type: none"> Percussive breakers can only be used for at most 8 working days in the first two months Subsequent notifications will be valid for one month, during which percussive breakers will be allowed to operate for 2 consecutive working days. 	<p>For the first notification, the number of working days allowed is increased to 8</p> <p>Restricted hours adjusted to 10 a.m. to 5 p.m.</p>
<p>Notification fee: \$500 per notification (No fees will be charged for changes for the first two times. The fee will be waived for changes due to Red/Black Rainstorm Warning Signal or Typhoon Signal No. 8 or above.)</p>	<p>Notification fee: \$100 per notification (No fees will be charged for changes for the first two times. The fee will be waived for changes due to Red/Black Rainstorm Warning Signal or Typhoon Signal No. 8 or above.)</p>	Fee reduced
<p>Control of percussive drills:</p> <ul style="list-style-type: none"> No notification is required for use during specified time (11 a.m. to 2 p.m. on days other than Saturdays, Sundays and general holidays); or On dates specified in the notification (9 a.m. to 6 p.m.) 	<ul style="list-style-type: none"> No notification is required for use during specified time (10 a.m. to 5 p.m. on days other than Saturdays, Sundays and general holidays) 	<p>No notification is required; and the restricted hours are extended to 10 a.m. to 5 p.m.</p>

Quiet Renovation Equipment Note

Renovation procedure	Quiet renovation equipment	Expected decrease in noise level (dB)	General price
Removal of concrete wall	Handheld hydraulic crusher 	↓ About 30 dB(A)	From about \$30,000
Removal of ceramic tiles	Light-weight breaker (used with flat chisel) 	↓ About 2-3 dB(A)	From about \$1,000
Coring	Handheld coring machine 	↓ About 20 dB(A)	From about \$2,000
Anchor fixing on wall/ceiling	Direct fastening machine 	↓ About 20 dB(A)	From about \$3,000
Brick cutting	Handheld brick cutter 	↓ About 10 dB(A)	From about \$5,000
Grooving/channeling	Wall chaser 	↓ About 20 dB(A)	From about \$1,000

Note (1): The difference in noise level (dB) is derived using the conventional breaker with pointed chisel as the benchmark and measured at the residential unit below.

Note (2): In general, the difference in audio experience between working in an office (about 50 dB) and staying within 25-meters of a busy road (about 70 dB) is about 20 dB. A decrease of 20 dB implies a drop in sound energy by 100 times.

Response Form for Consultation

E-mail: nco_review@epd.gov.hk

Mail: Assessment and Noise Group
Environmental Protection Department
26th floor, Southorn Centre,
130 Hennessy Road,
Wan Chai, Hong Kong
(Re: Consultation on Control over Domestic Renovation Noise)

Fax: 2802 4511



[Click Here](#) to access the electronic form

Part I: Basic information

Name*:

_____ (Individual/Organisation)

Name of the organisation/company*:

E-mail address*:

*optional

Part II: Consultation questions

1. In which of the following capacity are you answering this Response Form for Consultation?

- Professional body Academic body Public organisation
 Individual Others

2. Do you agree that there is a need to tighten up the control over domestic renovation noise?

- Agree Disagree

3. In your opinion, should the proposed total number of days of renovation works using percussive breakers be restricted to 5 (Option 1) or 8 (Option 2) working days?

5 working days (Option 1) 8 working days (Option 2)

Other comments: _____

4. Which of the following proposed operation hours do you think percussive breakers in renovation works should be restricted to?

9 a.m. to 6 p.m. on days other than Saturdays, Sundays and general holidays (Option 1)

10 a.m. to 5 p.m. on days other than Saturdays, Sundays and general holidays (Option 2)

Other comments: _____

5. In Option 2, do you think it is necessary to further control how the 8 permitted working days are allocated for the use of percussive breaker within the first two months?

Maintain flexibility in works, with no restriction on how the 8 working days are allocated.

Require additional restriction on work stage allocation, setting limits on the 8 working days during renovation (e.g., a maximum of two 4-day periods or a maximum of three stages, etc.).

Other comments: _____

6. In your opinion, should the notification fee be set at \$500 (Option 1) or \$100 (Option 2)?

\$500 (Option 1)

\$100 (Option 2)

Other comments: _____

7. Which of the following do you think should be the specified time of using percussive drills?

11 a.m. to 2 p.m. on days other than Saturdays, Sundays and general holidays (Option 1)

10 a.m. to 5 p.m. on days other than Saturdays, Sundays and general holidays (Option 2)

Other comments: _____

8. In general, which option do you prefer ?

Option 1 (5 working days and \$500 notification fee)

Option 2 (8 working days and \$100 notification fee)

Other comments: _____

9. If a fixed penalty system is to be introduced, do you think it is appropriate to set the fixed penalty at \$10,000?

Too low

Appropriate

Too high

10. Do you think prior notification on the renovation schedule of nearby households can facilitate you in devising a plan that minimise your exposure to renovation noise?

Yes

No

11. Other comments:

