

## LEGISLATIVE COUNCIL BRIEF

Dangerous Drugs Ordinance  
(Chapter 134)

### **DANGEROUS DRUGS ORDINANCE (AMENDMENT OF FIRST SCHEDULE) ORDER 2021**

Control of Chemicals Ordinance  
(Chapter 145)

### **CONTROL OF CHEMICALS ORDINANCE (AMENDMENT OF SCHEDULE 2) ORDER 2021**

#### INTRODUCTION

**A** At the meeting of the Executive Council on 8 June 2021, the Council ADVISED and the Chief Executive ORDERED that the Dangerous Drugs Ordinance (Amendment of First Schedule) Order 2021, at **Annex A**, should be made under section 50(1) of the Dangerous Drugs Ordinance (Cap. 134) (“DDO”), to impose control on 4F-MDMB-BINACA<sup>1</sup>, 5F-AMB-PINACA<sup>2</sup>, 5F-MDMB-PICA<sup>3</sup>, crotonylfentanyl, etizolam, flualprazolam, mitragynine and 7-hydroxymitragynine.

**B** 2. On 9 June 2021, the Secretary of Security made the Control of Chemicals Ordinance (Amendment of Schedule 2) Order 2021, at **Annex B**, under section 18A(1) of the Control of Chemicals Ordinance (Cap. 145) (“CCO”), to impose control on methyl alpha-phenylacetoacetate (“MAPA”).

---

<sup>1</sup> Also known as 4F-MDMB-BUTINACA.

<sup>2</sup> Also known as 5F-AMB and 5F-MMB-PINACA.

<sup>3</sup> Also known as 5F-MDMB-2201.

## JUSTIFICATIONS

3. As a regular exercise, the Government has from time to time proposed amendments to DDO and CCO as appropriate to include new substances under statutory control, having regard to a host of relevant factors, including international control requirements, the uses and harmful effects of the substances, severity of abuse in the local and overseas contexts, advice of the Action Committee Against Narcotics (“ACAN”) and relevant authorities, etc. This is to ensure that law enforcement agencies in Hong Kong could respond effectively to the latest drug developments.

### *Eight Dangerous Drugs*

#### Six Substances under International Control

4. At the 63<sup>rd</sup> Session of the United Nations Commission on Narcotic Drugs (“UNCND”) held in March 2020, Member States adopted the recommendation by the World Health Organisation (“WHO”) to place 12 dangerous drugs under international control. Six<sup>4</sup> of them are already controlled under DDO in Hong Kong. For the remaining six substances, their adverse effects as elaborated in the 42<sup>nd</sup> report of the WHO Expert Committee on Drug Dependence are as follows –

- (a) **4F-MDMB-BINACA, 5F-AMB-PINACA and 5F-MDMB-PICA:** they are synthetic cannabinoids which affect the central nervous system and have higher potency than that of tetrahydrocannabinol (“THC”)<sup>5</sup>. For 4F-MDMB-BINACA, the reported adverse effects include auditory and visual hallucinations, vomiting, paranoia, euphoria, irregular heartbeat, agitation, confusion, insomnia and chest pain. It had been detected in biological specimen obtained from cases involving deaths and impaired driving in the United States (“US”). For 5F-AMB-PINACA, reported clinical symptoms of abusing the substance include cognitive impairment, slowed movement, verbal slur, anxiety and incoordination. It was associated with at least three deaths, and was identified as a causal factor in more than 20 motor accidents in Japan involving deaths in 2012 to 2014. As regards 5F-MDMB-PICA, the reported adverse effects include decreased mental status, agitated delirium, and seizures. In August to September 2018, numerous overdose cases related to it had been reported in US;

---

<sup>4</sup> Namely 4-CMC (also known as 4-chloromethcathinone and clephedrone), AB-FUBINACA, alpha-PHP (also known as alpha-pyrrolidinohexanophenone), DOC (also known as 4-chloro-2,5-DMA or 2,5-dimethoxy-4-chloroamphetamine), N-ethylhexedrone and valerylfeantanyl.

<sup>5</sup> THC, a major psychoactive cannabinoid in cannabis, is controlled under the First Schedule to DDO.

- (b) **Crotylfentanyl:** crotylfentanyl's chemical structure is similar to that of fentanyl<sup>6</sup> and its pharmacology and toxic effects are likely to be similar. Preclinical studies suggest that it is less potent than fentanyl and more potent than oxycodone<sup>7</sup>. The data available show that the substance has high abuse potential and poses a serious public health threat;
- (c) **Etizolam:** etizolam is chemically related to benzodiazepine<sup>8</sup>. Frequently reported adverse effects of etizolam include drowsiness and muscle weakness; it may also cause sedation, sleepiness, ataxia, slurred speech, and loss of consciousness. Scotland in particular saw an increasing number of deaths related to etizolam in recent years, with more than 540 deaths related to the substance in 2018; and
- (d) **Flualprazolam:** flualprazolam belongs to the benzodiazepine family. It has a relatively high potency with comparatively short onset of action, and likely has adverse reactions similar to alprazolam<sup>9</sup>. It is likely to cause disinhibition and sedation that would impair driving, and when combined with substances such as opioids, would contribute to increased overdose through benzodiazepine-potentiated or opioid-induced respiratory depression. The substance was reported to be found in 26 death cases since 2017.

5. Other than etizolam which is known to be used clinically in three countries<sup>10</sup>, all of the remaining five substances have no known medical use or therapeutic application. There is no registered pharmaceutical product containing any of the six substances in Hong Kong. As regards trade declarations, from 2016 to 2020, there is no record of import and export of the above substances except for 65 import consignments and 17 export consignments of etizolam tablets.

### Mitragynine and 7-hydroxymitragynine

6. In addition to the substances above which are under the United Nations' control, it is proposed to place two substances, namely mitragynine and 7-hydroxymitragynine, under the control of DDO. The two

---

<sup>6</sup> Fentanyl, which is an opioid analgesic, is a dangerous drug controlled under the First Schedule to DDO and Schedule 10 (Poisons List) to the Pharmacy and Poisons Regulations (Cap. 138A).

<sup>7</sup> Oxycodone is a dangerous drug controlled under the First Schedule to DDO.

<sup>8</sup> Certain benzodiazepines, such as triazolam and midazolam, are dangerous drugs controlled under the First Schedule to DDO.

<sup>9</sup> Alprazolam is a dangerous drug controlled under the First Schedule to DDO.

<sup>10</sup> Namely India, Italy and Japan for treating anxiety and psychiatric pathologies.

substances are the major compounds available in a plant known as *mitragyna speciosa* or kratom, and interact with opioid receptors in the brain, producing sedation, pleasure and decreased pain, especially when users consume large amounts of the plant. Mitragynine also interacts with other receptor systems in the brain to produce stimulant effects. With clear abusive potential, reported health effects of kratom use include nausea, itching, sweating, dry mouth, constipation, increased urination, loss of appetite, seizures, hallucinations and withdrawal symptoms. Symptoms of psychosis have also been reported in some users. In the US, there were 91 reports of deaths in people who had ingested kratom between 2016 and 2017; and 44 deaths reported to be associated with the use of kratom in 2018. A number of overseas jurisdictions have controlled mitragynine and 7-hydroxymitragynine or *mitragyna speciosa* (kratom), such as Australia, Singapore, the United Kingdom and several states of the US.

7. Currently, mitragynine and 7-hydroxymitragynine are not controlled under DDO in Hong Kong. They have no known medical use or therapeutic application<sup>11</sup>, and there is no registered pharmaceutical product containing the two substances or kratom in Hong Kong. As regards trade declarations, from 2016 to 2020, there were no import or export consignments for both mitragynine and 7-hydroxymitragynine. For kratom, there were three import consignments amounting to 15 000 kg in 2020.

### ***One Precursor Chemical***

8. At the same UNCND Session mentioned in paragraph 4 above, Member States also adopted the International Narcotics Control Board<sup>12</sup> (“INCB”)’s recommendation to place MAPA under international control. MAPA is a substitute chemical for several precursors already under international control, such as 1-phenyl-2-propanone (“P-2-P”), alpha-phenylacetonitrile (“APAAN”) and alpha-phenylacetamide (“APAA”)<sup>13</sup>, and is highly suitable for the illicit manufacture of amphetamine and methamphetamine<sup>14</sup>.

---

<sup>11</sup> According to the National Institute on Drug Abuse of the US, some people use kratom in recent years as a herbal alternative to medical treatment in an attempt to control withdrawal symptoms and cravings caused by addiction to opioids or to other addictive substances such as alcohol. There is no scientific evidence so far that kratom is effective or safe for this purpose.

<sup>12</sup> INCB is an independent monitoring body established under the United Nations since 1968 for the implementation of the United Nations international drug control conventions, namely the Single Convention on Narcotic Drugs of 1961, the Convention on Psychotropic Substances of 1971 and the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988. One of its functions is to assess chemicals used in the illicit manufacture of drugs, in order to determine whether they should be placed under international control.

<sup>13</sup> P-2-P, APAAN and APAA are precursor chemicals controlled under the Second Schedule of CCO.

<sup>14</sup> Amphetamine and methamphetamine are dangerous drugs controlled under the First Schedule to DDO.

9. INCB considers that international control of MAPA is required in order to limit its availability for illicit drug manufacture and subsequently reduce the quantity of amphetamine and methamphetamine manufactured illicitly from the precursor chemical.

10. Currently, MAPA is not controlled under CCO in Hong Kong. There is no registered pharmaceutical product containing or made from this precursor chemical in Hong Kong. As regards trade declarations, there is no record of import and export of this precursor chemical over the past five years.

## **THE PROPOSALS**

### ***Eight Dangerous Drugs***

11. We propose to amend Part I of the First Schedule to DDO to impose control on 4F-MDMB-BINACA, 5F-AMB-PINACA, 5F-MDMB-PICA, crotonylfentanyl, etizolam, flualprazolam, mitragynine and 7-hydroxymitragynine.

12. Under DDO, substances included in Part I of the First Schedule are dangerous drugs and are subject to the control of a licensing scheme administered by the Department of Health (“DH”). The manufacture, import, export and supply of these substances will require respective licences issued by DH. Trafficking and manufacturing of the substances in contravention of DDO will be subject to a maximum penalty of life imprisonment and a fine of \$5 million. Possession and consumption of the substances in contravention of DDO will be subject to a maximum penalty of seven years’ imprisonment and a fine of \$1 million.

### ***One Precursor Chemical***

13. We also propose to amend Schedule 2 to CCO to impose control on MAPA.

14. Under CCO, substances included in Schedule 2 are subject to the control of a licensing scheme administered by C&ED. It is an offence for a person to have in his/her possession, manufacture, transport or distribute these substances for the unlawful production of dangerous drugs; or import or export these substances not under and in accordance with a licence. The maximum penalty is imprisonment for 15 years and a fine of \$1 million.

## **THE ORDERS**

15. The Dangerous Drugs Ordinance (Amendment of First Schedule) Order 2021, at **Annex A**, seeks to add 4F-MDMB-BINACA, 5F-AMB-PINACA, 5F-MDMB-PICA, crotonylfentanyl, etizolam,

flualprazolam, mitragynine and 7-hydroxymitragynine to Part I of the First Schedule to DDO.

16. The Control of Chemicals Ordinance (Amendment of Schedule 2) Order 2021, at **Annex B**, seeks to add MAPA to Schedule 2 to CCO.

## **LEGISLATIVE TIMETABLE**

17. The legislative timetable will be –

Gazettal of the Orders	18 June 2021
Tabling at the Legislative Council (LegCo) for negative vetting	23 June 2021
Commencement date of the Orders	13 August 2021

## **IMPLICATIONS OF THE PROPOSALS**

18. The proposals are in conformity with the Basic Law, including the provisions concerning human rights. They will not affect the current binding effect of DDO and CCO. They have no economic, productivity, environmental or gender implications. The proposals are also in line with the sustainability principle of pursuing policies which protect the health of the people of Hong Kong. Apart from inflicting health damage to the abuser, drug abuse is also often found to have a profound impact on an abuser's family, e.g. causing mixed emotions such as anger and frustration among family members. The proposals represent our ongoing efforts to closely monitor emerging new synthetic drugs and precursor chemicals, and ensure that they are brought under control in a timely manner. This would help prevent possible family problems and tension that may be aroused by drug-abusing family members. The additional workload and financial implications arising from the implementation of the proposals are expected to be minimal and any additional requirements will be absorbed by the relevant bureaux and departments with existing resources.

## **PUBLIC CONSULTATION**

19. Relevant stakeholders, including holders of licences under DDO, CCO and the Pharmacy and Poisons Ordinance (Cap. 138), the logistics trade and relevant industry groups were consulted on the legislative proposals on amending DDO and CCO in August 2020 and February 2021. Only two letters were received, one from the Federation of Hong Kong Industries supporting the proposals and one from a law firm expressing objection to placing mitragynine

and 7-hydroxymitragynine under control, primarily on grounds that the harms of the two substances were not as severe as morphine; there were doubts on their abusive potential and causal link with death cases; there were claimed therapeutic uses of the substances (such as pain relief) by communities; they were not yet controlled under US federal law; and there would be potential problems created by regulation, such as fostering a black market and making it more difficult to obtain the substances for research purpose, etc. DH was consulted on the objection raised and advised that DDO covers a range of substances with different pharmacological effects, and the harms and abusive potential of mitragynine and 7-hydroxymitragynine are clearly established as set out in paragraph 6 above. The proven pharmaceutical uses of them are also lacking. Moreover, a number of overseas jurisdictions have already put the two substances or mitragyna speciosa (kratom) under control. By regulating the two substances in Hong Kong, the Government would be able to deter their illicit use and trafficking, thereby safeguarding the health of our residents, whilst continuing to allow legitimate use (such as research) through DH's licensing scheme. Having regard to the host of relevant factors, the Government maintains the view that mitragynine and 7-hydroxymitragynine should be controlled under DDO.

20. We consulted ACAN on 16 September 2020, which supported the proposed control. We also consulted the LegCo Panel on Security on the proposed control on 9 April 2021. There was no adverse comment.

## **PUBLICITY**

21. The Dangerous Drugs Ordinance (Amendment of First Schedule) Order 2021 and the Control of Chemicals Ordinance (Amendment of Schedule 2) Order 2021 will be published in the Gazette on 18 June 2021. A press release will be issued on 16 June 2021, and a spokesperson will be available for answering media enquiries.

## **BACKGROUND**

22. The growing predominance of psychotropic substance abuse and the continuous emergence of new synthetic drugs and precursor chemicals pose challenges to legislative control and law enforcement globally. We need to remain vigilant in closely monitoring overseas and local drug trends and take timely action to bring new drugs and precursor chemicals under legislative control.

## **ENQUIRIES**

23. Any enquiries concerning this brief can be directed to the following officer –

Miss Fiona Li  
Principal Assistant Secretary for Security (Narcotics)2  
Tel. No.: 2867 5220

**Narcotics Division**  
**Security Bureau**  
**June 2021**



## Dangerous Drugs Ordinance (Amendment of First Schedule) Order 2021

(Made by the Chief Executive under section 50(1) of the Dangerous Drugs Ordinance (Cap. 134) after consultation with the Executive Council)

### 1. Commencement

This Order comes into operation on 13 August 2021.

### 2. Dangerous Drugs Ordinance amended

The Dangerous Drugs Ordinance (Cap. 134) is amended as set out in section 3.

### 3. First Schedule amended

- (1) First Schedule, Part I, paragraph 1(a), after item “Codoxime (可多克辛)”—

**Add**

“Crotonylfentanyl (巴豆酰芬太尼)”.

- (2) First Schedule, Part I, paragraph 1(a), after item “Eticyclidine (乙環利定)”—

**Add**

“Etizolam (依替唑侖)”.

- (3) First Schedule, Part I, paragraph 1(a), after item “Fentanyl (芬太尼)”—

**Add**

“Flualprazolam (氟阿普唑侖)”.

- (4) First Schedule, Part I, paragraph 1(a), after item “Methyl N-[[1-(cyclohexylmethyl)-1H-indol-3-yl]carbonyl]-3-

methylvalinate (N-[[1-(環己基甲基)-1H-吲哚-3-基]羰基]-3-甲基纈氨酸甲酯)”—

**Add**

“Methyl 2-[[1-(4-fluorobutyl)-1H-indazole-3-carbonyl]amino]-3,3-dimethylbutanoate (2-[[1-(4-氟丁基)-1H-吲唑-3-羰基]氨基]-3,3-二甲基丁酸甲酯)”.

- (5) First Schedule, Part I, paragraph 1(a), after item “Methyl 2-[[1-(5-fluoropentyl)-1H-indazole-3-carbonyl]amino]-3,3-dimethylbutanoate (3,3-二甲基-2-[1-(5-氟戊基)吲唑-3-甲酰氨基]丁酸甲酯)”—

**Add**

“Methyl 2-[[1-(5-fluoropentyl)-1H-indazole-3-carbonyl]amino]-3-methylbutanoate (2-[[1-(5-氟戊基)-1H-吲唑-3-羰基]氨基]-3-甲基丁酸甲酯)”.

Methyl 2-[[1-(5-fluoropentyl)-1H-indole-3-carbonyl]amino]-3,3-dimethylbutanoate (2-[[1-(5-氟戊基)-1H-吲哚-3-羰基]氨基]-3,3-二甲基丁酸甲酯)”.

- (6) First Schedule, Part I, paragraph 1(a), after item “Midazolam (咪達唑侖)”—

**Add**

“Mitragynine (帽柱木鹼)”.

- (7) First Schedule, Part I, paragraph 1(a), after item “3-Hydroxy-2-[6-isopropenyl-3-methyl-cyclohex-2-en-1-yl]-5-pentyl-1,4-benzoquinone (3-羥基-2-[6-異丙烯基-3-甲基-環己-2-烯-1-基]-5-戊基-1,4-苯醌)”—

**Add**

“7-Hydroxymitragynine (7-羥基帽柱木鹼)”.

**Explanatory Note**

This Order amends Part I of the First Schedule to the Dangerous Drugs Ordinance (Cap. 134) to bring 8 substances into the regulatory regime under the Ordinance.



Chief Executive

10 June 2021

---

## Control of Chemicals Ordinance (Amendment of Schedule 2) Order 2021

(Made by the Secretary for Security under section 18A(1) of the Control of Chemicals Ordinance (Cap. 145))

### 1. Commencement

This Order comes into operation on 13 August 2021.

### 2. Control of Chemicals Ordinance amended

The Control of Chemicals Ordinance (Cap. 145) is amended as set out in section 3.

### 3. Schedule 2 amended

Schedule 2—

#### Add

“24. Methyl alpha-phenylacetoacetate ( $\alpha$ -苯乙酰乙酸甲酯) (\*)”.



Secretary for Security

9 June 2021

## Explanatory Note

This Order amends Schedule 2 to the Control of Chemicals Ordinance (Cap. 145) in order to impose control on Methyl alpha-phenylacetoacetate (commonly known as MAPA) and its salts (whenever the existence of such salts is possible).

- MAPA and its salts can be used in the manufacture of amphetamine and methamphetamine, which are dangerous drugs specified in Part I of the First Schedule to the Dangerous Drugs Ordinance (Cap. 134).