Model Scheduling New/Novel Psychoactive Substances Act (Third Edition)

July 1, 2019.

This project was supported by Grant No. G1799ONDCP03A, awarded by the Office of National Drug Control Policy. Points of view or opinions in this document are those of the author and do not necessarily represent the official position or policies of the Office of National Drug Control Policy or the United States Government.

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[1] **Second edition published in September 2018; first edition published in 2014. Content in red bold first added in third edition.**

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Policy Statement and Background

The emergence and proliferation over the past 10 years of manufactured drugs designed to mimic the effects of controlled substances is a significant public health threat facing the United States and other countries today. With unfortunate regularity, communities are experiencing outbreaks of localized overdoses or bad reactions due to the ingestion of one or more of these substances.[2] Colloquially referred to as "synthetic drugs" or "designer drugs," the United Nations Office on Drugs and Crime ("UNODC") uses the terms "new psychoactive substances" or "novel psychoactive substances" ("NPS") to describe them. UNODC's definition of NPS is "substances of abuse, either in a pure form or a preparation, that are not controlled by the 1961 Single Convention on Narcotic Drugs or the 1971 Convention on Psychotropic Substances, but which may pose a public health threat."[3]

NPS fall into several structural categories that include synthetic cannabinoids (also known as "synthetic marijuana," "spice," or "K2"), substituted cathinones (also known as "bath salts"), phenethylamines, opioids, tryptamines, benzodiazepines, and several others. According to UNODC's World Drug Report 2018, in the nine years between 2009 and 2017, over 100 different countries report encountering more than 800 different NPS. The 800+ substances reported to UNODC during those years include more than 250 different synthetic cannabinoids, and approximately 150 different substances in each of the cathinone, phenethylamine, and "other" (which include fentanyl analogues and benzodiazepines) categories.[4]

The concerns about NPS stem from several factors. First, ingesting NPS can cause a number of serious health problems, including increased heart rate, increased blood pressure, agitation, anxiety, nausea, vomiting, tachycardia, tremors, seizures, hallucinations, paranoid behavior, non-responsiveness, and death. Second, products containing NPS are readily available to buyers,

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[2] As one in a sea of examples, within the span of two days in July 2018, reports in Philadelphia and Washington, D.C. described recent overdose spikes caused in whole or in part by synthetic drugs. Marisa Penaloza, *D.C. Has Had More Than 300 Synthetic Marijuana Overdoses in 2 Weeks*, NPS (July 28, 2018), https://www.npr.org/2018/07/27/632261920/d-c-has-had-more-than-300-suspected-k2-overdoses-in-2-weeks; Joel Wolfram, Synthetic marijuana detected in drug sample from Philly overdose spike, WHYY (July 27, 2018), https://whyy.org/articles/synthetic-marijuana-detected-in-drug-sample-from-philly-overdose-spike/.

[3] *UNODC Early Warning Advisory on New Psychoactive Substances*, UNODC.org, https://www.unodc.org/LSS/Page/NPS (last visited Aug. 3, 2018)

[4] UNODC, *World Drug Report 2018* 60 (June 2008), http://www.unodc.org/wdr2018/prelaunch/WDR18_Booklet_3_DRUG_MARKETS.pdf.

including at convenience stores, gas stations, and via online sellers, sometimes in packaging that appears designed to attract teenagers and young adults. Third, the clandestine chemists developing NPS often reconfigure the chemical structures of their products to create unregulated versions of drugs in an effort to circumvent controlled substance laws. Indeed, in some countries, people refer to certain NPS as "legal highs," because of the belief (whether accurate or mistaken) that local drug prohibitions do not apply.

Ideally, any comprehensive approach to reducing NPS misuse should address at least: (1) prevention including education about the dangers of use; (2) ensuring adequate resources devoted to intervention, treatment, recovery supports; and (3) supply reduction primarily through law enforcement action. Supply reductions include decreasing the amount of NPS as well as strengthening deterrence by increasing the likelihood that an NPS manufacturer/distributor/seller faces consequences for his or her conduct, via criminal penalties, economic losses, or both.

One available avenue for reducing NPS supply is classifying each substance that presents a threat to public health as a controlled substance. By doing so, state and federal restrictions on the manufacture and sale of controlled substances can be applied to NPS. The ever-changing chemical structure of emerging substances makes this task difficult. By the time that policymakers can move from the initial discovery of a new substance to permanent scheduling as controlled (which can take over a year in some jurisdictions), a different substance replaces the old one and the process must restart. Accordingly, the National Alliance for Model State Drug Laws ("NAMSDL") recommends a multi-faceted approach to controlled substance scheduling containing each of these aspects: (1) a robust set of regularly updated controlled substance schedules covering as many NPS as possible; (2) a method to schedule emerging NPS on an expedited (yet temporary) basis, while authorities decide whether, and work through the more timing consuming process, to schedule on a permanent basis; and (3) a means by which a yet-to-be-scheduled analogue can be treated as a controlled substance even before the temporary scheduling period begins.

NAMSDL's Model Scheduling of New/Novel Psychoactive Substances Act addresses aspect (1). The Act sets out language that can be used to schedule NPS in such a way that should help limit the ability of chemists to simply alter a substance by one or two molecules and create a new substance that is not covered by the existing law. The latest version of this Act contains updated synthetic cannabinoid classifications and definitions of substituted cathinones, based on recently enacted state legislation. The Act also includes structural classes for N-Benzyl phenethylamine compounds, substituted phenylcyclohexylamines, fentanyl derivatives, and newly identified unclassified NPS.

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Highlights[5]

- Sets out a list of class definitions for synthetic cannabinoids with examples for each class.
- Sets out class language for substituted cathinones and a list of substituted cathinones.
- Sets out four options for class language for fentanyl derivatives which contain examples of these emerging group of substances.
- Sets out a list of class definitions for other NPS with examples for each class. These other classes include substituted phenethylamines, N-Benzyl phenethylamine compounds, substituted tryptamines, substituted phenylcyclohexylamines, and unclassified NPS.
- **Appendix contains list of newly identified NPS found through forensic analysis that have not been scheduled by any state as of publishing date.**

[5] **Content in red bold first added in third edition**

SECTION I. SHORT TITLE.

This Act is known and may be cited as the "Model Scheduling New/Novel Psychoactive Substances Act" (the "Act").

SECTION II. PURPOSE

The purpose of this Act is to provide a comprehensive method for scheduling emerging new/novel psychoactive substances that: (1) is as up-to-date and complete as possible; and (2) minimizes the likelihood that small chemical changes to an already scheduled substance will result in a new substance that is not covered by the existing law.

SECTION III. SYNTHTETIC CANNABINOIDS.[6]

[The state code provision containing Schedule 1 substances] is hereby amended to list the following classes of synthetic cannabinoids.

1) **Tetrahydrocannabinols**--Any tetrahydrocannabinols naturally contained in a plant of the genus Cannabis, the synthetic equivalents of the substances contained in the plant or in the resinous extracts of the genus Cannabis, or synthetic substances, derivatives, and their isomers with similar chemical structure and pharmacological activity, including, but not limited to, Delta 9 tetrahydrocannabinols and their optical isomers, Delta 8 tetrahydrocannabinols and their optical isomers, Delta 6a,10a tetrahydrocannabinols and their optical isomers, or any compound containing a tetrahydrobenzo[c]chromene structure with substitution at either or both the 3-position or 9-position, with or without substitution at the 1-position with hydroxyl or alkoxy groups, including, but not limited

[6] The Act sets out a list of class definitions for synthetic cannabinoids with examples for each class. This model language is based on Fla. Stat. Ann. § 893.03, as took effect in October 2017. In 2016, schedule I within Fla. Stat. Ann. § 893.03 was amended substantially to classify NPS into the following six general substance classes: Synthetic Cannabinoids, Substituted Cathinones, Substituted Phenethylamines, N-Benzyl Phenethylamines Compounds, Substituted Tryptamines, and Substituted Phenylcyclohexylamines. NAMSDL views the Florida statute as having one of the most up-to-date and detailed classifications for synthetic cannabinoids among all states, and therefore incorporates the structure of its statute into this Act. Added to the substances listed in Fla. Stat. Ann. § 893.03 are individual synthetic cannabinoids that: (1) are listed in D.C. Mun. Regs. Subt. 22-B, § 1201; (2) were listed in the 2014 version of NAMSDL's model scheduling language; or (3) were added to federal and/or state controlled substance schedules during 2018. **Newly added subsection (17), Benzimidazole Ketones, is based upon DC ST § 48-902.04, as amended effective March 13, 2019.**

to:

Tetrahydrocannabinol, HU-210, HU-211, JWH-051, JWH-057, JWH-133, JWH-359, AM-087, AM-411, Parahexyl.

2) **Naphthoylindoles, Naphthoylindazoles, Naphthoylcarbazoles, Naphthylmethylindoles, Naphthylmethylindazoles, and Naphthylmethylcarbazoles**-- Any compound containing a naphthoylindole, naphthoylindazole, naphthoylcarbazole, naphthylmethylindole, naphthylmethylindazole, or naphthylmethylcarbazole structure, with or without substitution on the indole, indazole, or carbazole ring to any extent, whether or not substituted on the naphthyl ring to any extent, including, but not limited to:

JWH-004, JWH-007, JWH-009, JWH-011, JWH-015, JWH-016, JWH-018, JWH-019, JWH-020, JWH-022, JWH-046, JWH-047, JWH-048, JWH-049, JWH-070, JWH-071, JWH-072, JWH-073, JWH-076, JWH-079, JWH-080, JWH-081, JWH-082, JWH-094, JWH-096, JWH-098, JWH-116, JWH-120, JWH-122, JWH-148, JWH-149, JWH-164, JWH-166, JWH-175, JWH-180, JWH-081, JWH-182, JWH-184, JWH-185, JWH-189, JWH-192, JWH-193, JWH-194, JWH-195, JWH-196, JWH-197, JWH-198, JWH-199, JWH-200, JWH-210, JWH-211, JWH-212, JWH-213, JWH-234, JWH-235, JWH-236, JWH-239, JWH-240, JWH-241, JWH-242, JWH-258, JWH-262, JWH-386, JWH-387, JWH-394, JWH-395, JWH-397, JWH-398, JWH-399, JWH-400, JWH-412, JWH-413, JWH-414, JWH-415, JWH-424, AM-1220, AM-1235, AM-2201, Chloro JWH-018, Bromo JWH-018, AM-2232, THJ-2201, MAM-2201, EAM-2201, EG-018, EG-2201, AM-678, AM 1221. WIN 55,212.

3) **Naphthoylnaphthalenes** – any compound structurally derived from naphthalene-1-yl-(naphthalene-1-yl) methanone with substitutions on either of the naphthalene rings to any extent, including, but not limited to, the following:

CB-13.

4) **Naphthoylpyrroles--**Any compound containing a naphthoylpyrrole structure, with or without substitution on the pyrrole ring to any extent, whether or not substituted on the naphthyl ring to any extent, including, but not limited to:

JWH-030, JWH-031, JWH-145, JWH-146, JWH-147, JWH-150, JWH-156, JWH-243,

JWH-244, JWH-245, JWH-246, JWH-292, JWH-293, JWH-307, JWH-308, JWH-309, JWH-346, JWH-348, JWH-363, JWH-364, JWH-365, JWH-367,JWH-368, JWH-369, JWH-370, JWH-371, JWH-373, JWH-392.

5) **Naphthylmethylenindenes.--**Any compound containing a naphthylmethylenindene structure, with or without substitution at the 3-position of the indene ring to any extent, whether or not substituted on the naphthyl ring to any extent, including, but not limited to:

   JWH-171, JWH-176, JWH-220.

6) **Phenylacetylindoles and Phenylacetylindazoles--**Any compound containing a phenylacetylindole or phenylacetylindazole structure, with or without substitution on the indole or indazole ring to any extent, whether or not substituted on the phenyl ring to any extent, including, but not limited to:

   JWH-167, JWH-201, JWH-202, JWH-203, JWH-204, JWH-205, JWH-206, JWH-207, JWH-208, JWH-209, JWH-237, JWH-248, JWH-249, JWH-250, JWH-251, JWH-253, JWH-302, JWH-303, JWH-304, JWH-305, JWH-306, JWH-311, JWH-312, JWH-313, JWH-314, JWH-315, JWH-316, Cannabipiperidiethanone, RCS-8.

7) **Cyclohexylphenols--**Any compound containing a cyclohexylphenol structure, with or without substitution at the 5-position of the phenolic ring to any extent, whether or not substituted on the cyclohexyl ring to any extent, including, but not limited to:

   CP 47,497, Cannabicyclohexanol (CP 47,497 dimethyloctyl (C8) homologue), CP-55,940, CP 56,667, **CP 55,490**.

8) Benzoylindoles and Benzoylindazoles--Any compound containing a benzoylindole or benzoylindazole structure, with or without substitution on the indole or indazole ring to any extent, whether or not substituted on the phenyl ring to any extent, including, but not limited to:

   AM-679, AM-694, AM-1241, Pravadoline (WIN 48,098), AM-2233, RCS-4, RCS-4 C4 homologue, AM-630, AM-661.

9) **Tetramethylcyclopropanoylindoles and Tetramethylcyclopropanoylindazoles--**Any compound containing a tetramethylcyclopropanoylindole or tetramethylcyclopropanoylindazole structure, with or without substitution on the indole or indazole ring to any extent, whether or not substituted on the tetramethylcyclopropyl group to any extent, including, but not limited to:
UR-144, XLR11, Chloro UR-144, A-796,260, A-834,735, M-144, FUB-144, FAB-144, XLR12, AB-005, AB-034, **5-bromo-UR-144, 5-chloro-UR-144.**

10) **Tetramethylcyclopropane-thiazole carboxamides –** any compound structurally derived from 2,2,3,3-tetramethyl-N-(thiazol-2-ylidene)cyclopropanecarboxamide by substitution at the nitrogen atom of the thiazole ring by alkyl, haloalkyl, benzyl, halobenzyl, alkenyl, haloalkenyl, alkoxy, cyanoalkyl, hydroxyalkyl, cycloalkylmethyl, cycloalkylethyl, (N-methylpiperidin-2-yl)alkyl, (4-tetrahydropyran)alkyl, or 2-(4-morpholinyl)alkyl, whether or not further substituted in the thiazole ring to any extent, whether or not substituted in the tetramethylcyclopropyl ring to any extent, including:
A-836,339.

11) **Adamantoylindoles, Adamantoylindazoles, Adamantylindole carboxamides, and Adamantylindazole carboxamides--**Any compound containing an adamantoyl indole, adamantoyl indazole, adamantyl indole carboxamide, or adamantyl indazole carboxamide structure, with or without substitution on the indole or indazole ring to any extent, whether or not substituted on the adamantyl ring to any extent, including, but not limited to:
AKB48, Fluoro AKB48, STS-135, AM-1248, AB-001, APICA, Fluoro AB-001, 2NE1, **FUB-AKB48, 5F-MDMB-PICA**.

12) **Quinolinylindolecarboxylates, Quinolinylindazolecarboxylates, Quinolinylindolecarboxamides, and Quinolinylindazolecarboxamides--**Any compound containing a quinolinylindole carboxylate, quinolinylindazole carboxylate, isoquinolinylindole carboxylate, isoquinolinylindazole carboxylate, quinolinylindole carboxamide, quinolinylindazole carboxamide, isoquinolinylindole carboxamide, or isoquinolinylindazole carboxamide structure, with or without substitution on the indole or

indazole ring to any extent, whether or not substituted on the quinoline or isoquinoline ring to any extent, including, but not limited to:

PB-22, Fluoro PB-22, BB-22, FUB-PB-22, NPB-22, Fluoro NPB-22, FUB-NPB-22, THJ, Fluoro THJ.

13) **Naphthylindolecarboxylates and Naphthylindazolecarboxylates--**Any compound containing a naphthylindole carboxylate or naphthylindazole carboxylate structure, with or without substitution on the indole or indazole ring to any extent, whether or not substituted on the naphthyl ring to any extent, including, but not limited to:

NM-2201, SDB-005, Fluoro SDB-005, FDU-PB-22, 3-CAF.

14) **Naphthylindole carboxamides and Naphthylindazole carboxamides--**Any compound containing a naphthylindole carboxamide or naphthylindazole carboxamide structure, with or without substitution on the indole or indazole ring to any extent, whether or not substituted on the naphthyl ring to any extent, including, but not limited to:

NNEI, **MN-24**, Fluoro-NNEI, Chloro-NNEI, MN-18 , Fluoro MN-18.

15) **Alkylcarbonyl indole carboxamides, Alkylcarbonyl indazole carboxamides, Alkylcarbonyl indole carboxylates, and Alkylcarbonyl indazole carboxylates--**Any compound containing an alkylcarbonyl group, including 1-amino-3-methyl-1-oxobutan-2-yl, 1-methoxy-3-methyl-1-oxobutan-2-yl, 1-amino-1-oxo-3-phenylpropan-2-yl, 1-methoxy-1-oxo-3-phenylpropan-2-yl, with an indole carboxamide, indazole carboxamide, indole carboxylate, or indazole carboxylate, with or without substitution on the indole or indazole ring to any extent, whether or not substituted on the alkylcarbonyl group to any extent, including, but not limited to:

ADBICA, Fluoro ADBICA, Fluoro ABICA, AB-PINACA, Fluoro AB-PINACA, ADB-PINACA, Fluoro ADB-PINACA, AB-FUBINACA, ADB-FUBINACA, AB-CHMINACA, MA-CHMINACA, MAB-CHMINACA, AMB, Fluoro-AMB, FUB-AMB, MDMB-CHMINACA, MDMB-FUBINACA, MDMB-CHMICA, PX-1, PX-2, PX-3, PX-4, MO-CHMINACA, 5F-ADB, MMB-CHMICA, AMB-CHMICA

16) **Cumylindolecarboxamides and Cumylindazolecarboxamides--**Any compound containing a N-(2-phenylpropan-2-yl) indole carboxamide or N-(2-phenylpropan-2-yl) indazole carboxamide structure, with or without substitution on the indole or indazole

ring to any extent, whether or not substituted on the phenyl ring of the cumyl group to any extent, including, but not limited to:

CUMYL-PICA, Fluoro CUMYL-PICA, 4-CN-CUMYL-BUTINACA, 4-cyano-CUMYL-BUTINACA, 4-CN-CUMYL BINACA, CUMYL-4CN-BINACA, SGT-78, 5F-CUMYL-P7AICA, **5F-CUMYL-PINACA**

17) **Benzimidazole Ketones. Any compound containing or structurally derived from (benzimidazole-2-yl) methanone structure with or without substitution at either nitrogen atom of the benzimidazole ring by an alkyl, haloalkyl, cyanoalkyl, alkenyl, cycloalkylmethyl, cycloalkylethyl, benzyl, halobenzyl, 1-(N-methyl-2-piperidinyl)methyl, 2-(4-morpholinyl)ethyl, 1-(N-methyl-2-pyrrolidinyl)methyl, 1-(N-methyl-3- morpholinyl)methyl, (tetrahydropyran-4-yl)methyl, 1-methylazepanyl, phenyl, or halophenyl group, with substitution at the carbon of the methanone group by an adamantyl, naphthyl, phenyl, benzyl, quinolinyl, cycloalkyl, 1-amino-3-methyl-1-oxobutan-2-yl, 1-amino-3, 3-dimethyl-1-oxobutan-2-yl, 1-methoxy-3-methyl-1-oxobutan-2-yl, 1-methoxy-3, 3-dimethyl-1-oxobutan-2-yl or pyrrole group, and whether or not further substituted in the benzimidazole, adamantyl, naphthyl, phenyl, pyrrole, quinolinyl, or cycloalkyl rings to any extent, including, but not limited to:**

FUBIMINA, AM2201 benzimidazole analog, JWH-018 benzimidazole analog, BIM-018

18) Unclassified Synthetic Cannabinoids

Trade or Other Name	Chemical Compound
AM-356 (methanandamide)	(5Z,8Z,11Z,14Z)-N-[(1R)-2-hydroxy-1-methylethyl]icosa-5,8,11,14-tetraenamide; OR arachidonyl-1'-hydroxy-2'-propylamide
AM-855	(4aR,12bR)-8-hexyl-2,5,5-trimethyl-1,4,4a,8,9,10,11,12b-ctahydronaphtho[3,2-c]isochromen-12-ol
AM-905	(6aR,9R,10aR)-3-[(E)-hept-1-enyl]-9-(hydroxymethyl)-6,6-dimethyl- 6a,7,8,9,10,10a-hexahydrobenzo[c]chromen-1-ol
AM-906	(6aR,9R,10aR)-3-[(Z)-hept-1-enyl]-9-(hydroxymethyl)-6,6-dimethyl- 6a,7,8,9,10,10a-hexahydrobenzo[c]chromen-1-ol
AM-2389	(6aR,9R,10aR)-3-(1-hexyl-cyclobut-1-yl)-6a,7,8,9,10,10a-hexahydro-6,6- dimethyl-6H-dibenzo[b,d]pyran-1,9 diol
BAY 38-7271	(-)-(R)-3-(2-Hydroxymethylindanyl-4-oxy)phenyl-4,4,4-trifluorobutyl-1-sulfonate

Trade or Other Name	Chemical Compound
CP 50,556-1 (Levonantradol)	9-hydroxy-6-methyl-3-[5-phenylpentan-2-yl]oxy-5,6,6a,7,8,9,10,10aoctahydrophenanthridin-1-yl]acetate; OR [(6S,6aR,9R, 10aR)-9-hydroxy-6- methyl-3-[(2R)-5-ph enylpentan-2-yl]oxy-5,6,6a,7,8,9,10,10aoctahydrophenanthridin-1-yl] acetate; OR [9-hydroxy-6-methyl-3-[5- phenylpentan-2-yl]oxy-5,6,6a,7,8,9,10, 10a-octahydrophenanthridin-1-yl]acetat
HU-243	3-dimethylheptyl-11-hydroxyhexahydrocannabinol
HU-308	[(91R,2R,5R)-2-[2,6-dimethoxy-4-(2-methyloctan-2-yl)phenyl]-7,7-dimethyl-4- bicyclo[3.1.1]hept-3-enyl]methanol
HU-331	3-hydroxy-2-[(1R,6R)-3-methyl-6-(1-methylethenyl)-2-cyclohexen-1-yl]-5- pentyl-2,5-cyclohexadiene-1,4-dione
HU-336	(6aR,10aR)-6,6,9-trimethyl-3-penty
JTE-907	N-(benzol[1,3]dioxol-5-ylmethyl)-7-methoxy-2-oxo-8-pentyloxy-1,2dihydroquinoline-3-carboxamide
URB-597	[3-(3-carbamoylphenyl)phenyl]-N-cyclohexylcarbamate
URB-602	[1,1'-Biphenyl]-3-yl-carbamic acid, cyclohexyl ester; OR cyclohexyl [1,1'- biphenyl]-3-ylcarbamate
URB-754	6-methyl-2-[(4-methylphenyl)amino]-4H-3,1-benzoxazin-4-one
URB-937	3'-carbamoyl-6-hydroxy-[1,1'-biphenyl]-3-yl cyclohexylcarbamate
SDB-006	1-pentyl-N-(phenylmethyl)-1H-indole-3-carboxamide
5F-EDMB-PINACA	**ethyl 2-(1-(5-fluoropentyl)-1H-indazole-3-carboxamido)-3,3-dimethylbutanoate**
5-chloro-AKB48 or 5-chloro APINACA	**N-(adamantanyl)-1-(5-chloropentyl) indazole-3-carboxamide**

19) **Other Synthetic Cannabinoids** –Any material, compound, mixture, or preparation that contains any quantity of a synthetic cannabinoid, as described in sub-subparagraphs 1-17:

a) With or without modification or replacement of a carbonyl, carboxamide, alkylene, alkyl, or carboxylate linkage between either two core rings, or linkage between a core ring and group structure, with or without the addition of a carbon or replacement of a carbon;

b) With or without replacement of a core ring or group structure, whether or not substituted on the ring or group structures to any extent; and

c) Is a cannabinoid receptor agonist, unless specifically excepted or unless listed in another schedule or contained within a pharmaceutical product approved by the United States Food and Drug Administration.

SECTION IV. SUBSTITUTED CATHINONES.[7]

[The state code provision containing Schedule 1 substances] is hereby amended to list the following class of substituted cathinones.

1) Unless specifically excepted, listed in another schedule, or contained within a pharmaceutical product approved by the United States Food and Drug Administration, any material, compound, mixture, or preparation, including its salts, isomers, esters, or ethers, and salts of isomers, esters, or ethers, whenever the existence of such salts is possible within any of the following specific chemical designations:
   a) Any compound containing a 2-amino-1-phenyl-1-propanone structure;
   b) Any compound containing a 2-amino-1-naphthyl-1-propanone structure; or
   c) Any compound containing a 2-amino-1-thiophenyl-1-propanone structure, whether or not the compound is further modified:
      i) With or without substitution on the ring system to any extent with alkyl, alkylthio, thio, fused alkylenedioxy, alkoxy, haloalkyl, hydroxyl, nitro, fused furan, fused benzofuran, fused dihydrofuran, fused tetrahydropyran, fused alkyl ring, or halide substituents;
      ii) With or without substitution at the 3-propanone position with an alkyl substituent or removal of the methyl group at the 3-propanone position;
      iii) With or without substitution at the 2-amino nitrogen atom with alkyl, dialkyl,

[7] The Act sets out a class definition for substituted cathinones along with a non-exhaustive list of examples.. This model language is based on Fla. Stat. Ann. § 893.03, as took effect in October 2017. In 2016, schedule I within Fla. Stat. Ann. § 893.03 was amended substantially to classify NPS into the following six general substance classes: Synthetic Cannabinoids, Substituted Cathinones, Substituted Phenethylamines, N-Benzyl Phenethylamines Compounds, Substituted Tryptamines, and Substituted Phenylcyclohexylamines. NAMSDL views the Florida statute as having one of the most up-to-date and detailed classifications for substituted cathinones among all states, and therefore incorporates the structure of its statute into this Act. Added to the substances listed in Fla. Stat. Ann. § 893.03 are individual substituted cathinones that: (1) are listed in D.C. Mun. Regs. Subt. 22-B, § 1201; (2) were listed in the 2014 version of NAMSDL's model scheduling language; or (3) were added to federal and/or state controlled substance schedules during 2018

acetyl, or benzyl groups, whether or not further substituted in the ring system; or

iv) With or without inclusion of the 2-amino nitrogen atom in a cyclic structure

2) Examples of this class include, but are not limited to, the following:

Trade or Other Name	**Chemical Compound**
Methcathinone	2-(methylamino)-1-phenylpropan-1-one
Ethcathinone	2-(ethylamino)-1-phenylpropan-1-one
Methylone, bk-MDMA, MDMC	3,4-Methylenedioxymethcathinone; OR 3,4-methylenedioxy-N-methylcathinone; OR 3,4-methylenedioxymethylcathinone
2,3-MDMC	2,3-Methylenedioxymethcathinone
MMC	Methylmethcathinone
MeOMC, MOMC	Methoxymethcathinone
FMC	Fluoromethcathinone
MEC	Methylethcathinone
Butylone, bk-MBDB	3,4-Methylenedioxy-alpha-methylaminobutyrophenone; OR beta-Keto-N-methylbenzodioxolylpropylamine; OR betaKeto-N-methyl-3,4-benzodioxyolybutanamine
Ethylone	3,4-Methylenedioxy-N-ethylcathinone; OR 3,4-methylenedioxyethylcathinone; OR 3,4-methylenedioxyethylcathinone; OR 3,4-methylenedioxyethcathinone
BMDP	3,4-Methylenedioxy-N-benzylcathinone
BMC	Bromomethcathinone
Buphedrone	alpha-Methylaminobutyrophenone; OR a-methylamino-butyrophenone; OR 2-(methylamino)-1- phenylbutan-1-one
Eutylone	3,4-Methylenedioxy-alpha-ethylaminobutyrophenone; OR beta-Keto-Ethylbenziodioxolylbutanamine
DMC	Dimethylcathinone
DMMC	Dimethylmethcathinone
Pentylone	3,4-Methylenedioxy-alpha-methylaminovalerophenone; OR beta-Keto-N-methylbenzodioxolylpentanamine; OR betaketo-ethylbenzodioxolylpentanamine

Trade or Other Name	**Chemical Compound**
Pentedrone	alpha-Methylaminovalerophenone; OR a-methylamino-Valerophenone; OR 2-(methylamino)-1-phenyl-1-pentanone; OR 2-methylamino-1-phenyl-1-pentanone
MPPP	Methyl-alpha-pyrrolidinopropiophenone
PPP	Pyrrolidinopropiophenone
PVP	Pyrrolidinovalerophenone or Pyrrolidinopentiophenone
MOPPP	Methoxy-alpha-pyrrolidinopropiophenone; OR 4-methoxy-alpha-pyrrolidinopropiophenone; OR 4-methoxy-a-pyrrolidinopropiophenone
F-MABP	Fluoromethylaminobutyrophenone
Me-EABP	Methylethylaminobutyrophenone
PBP	Pyrrolidinobutyrophenone
MeO-PBP	Methoxypyrrolidinobutyrophenone
Et-PBP	Ethylpyrrolidinobutyrophenone
3-Me-4-MeO-MCAT	3-Methyl-4-Methoxymethcathinone
Dimethylone, MDDMA, **bk-MDDMA**	3,4-Methylenedioxy-N,N-dimethylcathinone OR **1-(1,3-benzodioxol-5-yl)-2-(dimethylamino)propan-1-one**
BMDP	3,4-Methylenedioxy-N,N-diethylcathinone
	3,4-Methylenedioxy-N-acetylcathinone
	3,4-Methylenedioxy-N-acetylmethcathinone
	3,4-Methylenedioxy-N-acetylethcathinone
Methylbuphedrone	Methyl-alpha-methylaminobutyrophenone
	Methyl-alpha-methylaminohexanophenone
	N-Ethyl-N-methylcathinone
PHP	Pyrrolidinohexanophenone
PV8	Pyrrolidinoheptanophenone
	Chloromethcathinone
	4-Bromo-2,5-dimethoxy-alpha-aminoacetophenone
2-diphenylmethylpyrrolidine	2-benzylhydrylpyrrolidin; OR (S)-(-)-2-(diphenylmethyl)pyrrolidine; OR (S)-2-diphenylmethylpyrrolidine; OR (2S)-2-benzylhydrylpyrrolidine; OR (2S)diphenylmethylpyrrolidine
2-DPMP	desoxypipradrol; OR diphenylprolinol; OR 2-diphenylmethylpiperidine; OR 2-benzhydrylpiperidine

Trade or Other Name	**Chemical Compound**
2-FMC	2-fluoromethcathinone
3,4-DMMC	3,4-dimethylmethcathinone OR **1-(3,4-dimethylphenyl)-2-(methylamino)-1-propanone**
3-FMC	3-fluoromethcathinone OR **1-(3-fluorophenyl)-2-(methylamino)propan-1-one**
4-EMC	4-ethylmethcathinone; OR 4-ethyl-methcathinone
4-FMC, Flephedrone	4-fluoromethcathinone OR **1-(4-fluorophenyl)-2-(methylamino)propan-1-one**
4-MBC, Benzedrone	(±)-1-(4-methylphenyl)-2-(benzylamino)propan-1-one; OR 4-methyl-N-benzylcathinone; OR N-benzyl-4-methylcathinone; OR 1-(4-methylphenyl)-2-benzylaminopropan-1-one
4-MEC	4-methyl-N-ethylcathinone; OR 4-methylethcathinone; OR para-methyl-N-ethylcathinone; OR paramethylethcathinone; OR 4-methyl-ethylcathinone OR **2-(ethylamino)-1-(4-methylphenyl)-1-propanone**
3-MEC	**2-(ethylamino)-1-(m-tolyl)propan-1-one OR 3-Methyl-N-ethylcathinone**
4-MeMABP, **4-MeBP**	4-methylbuphedrone; OR (2-Methylamino-1-(4-methylphenyl)butan-1-one); OR 2-methylamino-1-(4-methylphenyl)butan-1-one
a-PBP, alpha-PBP	alpha-Pyrrolidinobutiophenone; OR aPyrrolidinobutiophenone; OR (RS)1-phenyl-2-(1-pyrrolidinyl)-1-pentanone
a-PPP, alpha-PPP	alpha-pyrrolidinopropiophenone; OR apyrrolidinopropiophenone
a-PVP, alpha-PVP	alpha-Pyrrolidinopentiophenone; OR aPyrrolidinopentiophenone;OR 1-phenyl-2-(1-pyrrolidinyl)-1-pentanone; OR alphapyrrolidinovalerophenone; OR a-pyrrolidinovalerophenone
BZ-6378 (sometimes used as another name for mephedrone)	4-methylephedrone
BZP	benzylpiperazine; OR N-benzylpiperazine
D2PM	diphenyl-2-pyrrolidinyl-methanol
Dimethocaine	(3-diethylamino-2,2-dimethylpropyl)-4-aminobenzoate
DMBDB, bk-DMBDB, dibutylone	1-(Benzo[d][1,3]dioxol-5-yl)-2-(dimethylamino)butan-1-one

Trade or Other Name	**Chemical Compound**
DMEC	dimethylethcathinone
Ephedrone (sometimes used as another name for methcathinone)	2-(methylamino)-1-phenylpropan-1-one; OR 2-methylamino-1-phenylpropan-1-one
EEC	Ethylethcathinone
EMC	Ethylmethcathinone
Fluorococaine	
FEC	Fluoroethcathinone
Fluoroisocathinone	
HMMC	3-methoxymethcathinone
Isopentedrone	
MaPPP, 4-MePPP, MPPP	4-methyl-alpha-pyrrolidinopropiophenone; OR 4-methyl-apyrrolidinopropiophenone; OR methylpyrrolidinopropiophenone; OR Methylpyrrolindinopropiophenone
MBP	Methylbuphedrone
MBZP	1-methyl-4-benzylpiperazine
MDAI	methylenedioxy-aminoindane; OR 5,6-methylenedioxy-2-aminoindane
MDAT	6,7-methylenedioxy-2-aminotetralin
MDMC	Methylenedioxymethcathinone
MDPBP	3,4-methylenedioxy-alpha-pyrrolidinobutiophenone; OR 3,4-methylenedioxy-a-pyrrolidinobutiophenone
MDPPP	3,4-methylenedioxy-a-pyrrolidinopropiophenone; OR (RS)-1-(3,4-methylenedioxyphenyl)-2-(1-pyrrolidinyl)-1-propanone; OR 3,4-methylenedioxy-alphapyrrolidinopropiophenone
MDPV, MDPK	3,4-methylenedioxypyrovalerone; OR methylenedioxypyrovalerone
Mephedrone, 4-MMC	4-methylmethcathinone; OR 4-methylephedrone; OR (RS)-2-methylamino-1-(4-methylphenyl)propan-1-one
3-MMC	**2-(methylamino)-1-(3-methylphenyl)-1-propanone OR 3-methyl MS OR 3-Methylmethcathinone**
Metamfepramone, N,N-DMMC	N,N-dimethylcathinone

Trade or Other Name	Chemical Compound
Methedrone, Bk-PMMA, PMMC	para-methoxymethcathinone; OR 4-methoxymethcathinone; OR methoxyphedrine; OR (RS)-1-(4-methoxyphenyl)-2-(methylamino)propan-1-one
MPBP	4-methyl-alpha-pyrrolidinobutyrophenone; OR 4-methyl-apyrrolidinobutryophenone; OR 4-methyl-alphapyrrolidinobutiophenone; OR 4-methyl-apyrrolidinobutiophenone
NRG-1, Naphyrone	Naphthylpyrovalerone OR **(RS)-1-naphthalen-2-yl-2-pyrrolidin-1-ylpentan-1-one**
NRG-2	
Mexedrone	3-methoxy-2-(methylamino)-1-(p-tolyl)propan-1-one
	3,4-methylenedioxy-N-tert-butylcathinone
MMMP	2-methyl-1-(4-(methylthio)phenyl)-2-morpholinopropiophenone
Hexen, NEH	Alpha-ethylaminohexanophenone OR N-ethylhexedrone
4-fluoro-alpha-PHP	4-fluoro-alpha-pyrrolidinohexiophenone
TH-PVP	3,4-tetramethylene-alpha-pyrrolidinovalerophenone
4-chloropentedrone	4-chloro-alpha-methylamino-valerophenone
N-ethylpentylone, ephylone	**1-(1,3-benzodioxol-5-yl)-2-(ethylamino)-pentan-1-one**
	4-chloro-N,N-dimethylcathinone
MDPHP	**3,4-Methylenedioxy-alpha-pyrrolidinohexanophenone**
Tertylone	**1–(1,3–benzodioxol–5–yl)–2–(tert–butylamino)propan–1–one**
N–ethyl Hexylone	**1–(1,3–benzodioxol–5–yl)–2–(ethylamino)hexan–1–one**
4'-methyl PHP, MPHP, PV4	**4'-methyl-α-pyrrolidinohexanophenone OR 4'-methyl-α-PHP**
C-PVP, 4-Chloro-α-PVP	**4'-chloro-α-Pyrrolidinovalerophenone (hydrochloride); OR 4-chloro-α-Pyrrolidinopentiophenone; OR 4-chloro-2-(1-pyrrolidinyl)-Valerophenone; OR 1-(4-chlorophenyl)-2-(pyrrolidin-1-yl)pentan-1-one**
TMFPP	**1-[3-(trifluoromethyl)phenyl]-piperazine OR 1-(m-Trifluoromethylphenyl) piperazine OR 3-Trifluoromethylphenylpiperazine**
Aminorex	**(RS)-5-phenyl-4,5-dihydro-1,3-oxazol-2-amine**

Trade or Other Name	Chemical Compound
4-MEAP, 4-MEAPP	4-Methyl-α-ethylaminopentiophenone (hydrochloride) OR 4-Methyl-α-ethylaminopentiophenone OR N-Ethyl-4'-methylnorpentedrone
PV8 (hydrochloride), α-PHPP	alpha-pyrrolidinoheptaphenone

SECTION V. SUBSTITUTED PHENETHYLAMINES.[8]

[The state code provision containing Schedule 1 substances] is hereby amended to list the following class of substituted phenethylamines.

1) This includes any compound, unless specifically excepted, specifically named in this schedule, or listed under a different schedule, structurally derived from phenylethan-2-amine by substitution on the phenyl ring in any of the following ways, that is to say, by substitution with a fused methylenedioxy ring, fused furan ring, or fused tetrahydrofuran ring; by substitution with two alkoxy groups; by substitution with one alkoxy and either one fused furan, tetrahydrofuran, or tetrahydropyran ring system; or by substitution with two fused ring systems from any combination of the furan, tetrahydrofuran, or tetrahydropyran ring systems.

   Whether or not the compound is further modified in any of the following ways, that is to say:

   a) By substitution of phenyl ring by any halo, hydroxyl, alkyl, trifluoromethyl, alkoxy, or alkylthio groups;
   b) By substitution at the 2-position by any alkyl groups; or
   c) By substitution at the 2-amino nitrogen atom with alkyl, dialkyl, benzyl, hydroxybenzyl, methylenedioxybenzyl, or methoxybenzyl groups.

2) Examples of this class include, but are not limited to, the following:

Trade or Other Name	Chemical Compound
2,5-DMA	2,5-dimethoxy-amphetamine; OR 2,5-dimethoxyamethylphenethylamine

[8] Section V uses model language originating from Section Three of the NAMSDL model document published in 2014. In addition, NAMSDL augments that model language with additional individual substances listed in either Fla. Stat. Ann. § 893.03 or D.C. Mun. Regs. Subt. 22-B, § 1201.

Trade or Other Name	Chemical Compound
2C-B	2-(4-bromo-2,5-dimethoxyphenyl)ethanamine; OR 2,5-Dimethoxy-4-bromophenethylamine
2C-C	4-Chloro-2,5-dimethoxyphenethylamine; OR 1-(4-Chloro-2,5-dimethoxyphenyl)-2-aminoethane; OR 1-(4-Chloro-2,5-dimethoxyphenyl)-2-ethanamine; OR 2-(4-Chloro-2,5-dimethoxyphenyl)ethanamine; OR 2-(4-Chloro-2,5-dimethoxyphenyl)ethanamine
2C-D	2-(2,5-Dimethoxy-4-methylphenyl)ethanamine; OR 2,5-Dimethoxy-4-methylphenethylamine
2C-E	4-Ethyl-2,5-dimethoxyphenethylamine; OR 2,5-dimethoxy-4-ethylphenethylamine; OR 1-(2,5-Dimethoxy-4-ethylphenyl)-2-aminoethane; OR 2,5-Dimethoxy-4-ethylphenethylamine; OR 2-(2,5-Dimethoxy-4-ethylphenyl)ethanamine
2C-H	2-(2,5-Dimethoxyphenyl)ethanamine; OR 2,5-Dimethoxyphenethylamine
2C-I	4-Iodo-2,5-dimethoxyphenethylamine; OR 2,5-dimethoxy-4-iodophenethylamine; OR 2-(4-Iodo-2,5-dimethoxyphenyl)ethanamine; OR 4-iodo-2,5-dimethoxybeta-phenylethylamine
2C-N	2-(2,5-Dimethoxy-4-nitro-phenyl)ethanamine; OR 2-(2,5-Dimethoxy-4-nitrophenyl)ethanamine; OR 2,5-Dimethoxy-4-nitrophenethylamine
2C-P	2-(2,5-Dimethoxy-4-(n)-propylphenyl)ethanamine; OR 2,5-Dimethoxy-4-propylphenethylamine
2C-T	2-(2,5-dimethoxy-4-(methylthio)phenyl)ethanamine; OR 4-methylthio-2,5-dimethoxyphenethylamine
2C-B-butterFLY	2-(10-Bromo-2,3,4,7,8,9-hexahydropyrano[2,3-g]chromen-5-yl)ethanamine
2C-B-FLY	2-(8-bromo-2,3,6,7-tetrahydrofuro [2,3-f][1]benzofuran-4-yl)ethanamine
2C-B-hemiFLY, 2CB-5-hemiFLY	2-(7-Bromo-5-methoxy-2,3-dihydro-1-benzofuran-4-yl)ethanamine
2C-B-FLY-NBOMe	N-(2-Methoxybenzyl)-1-(8-bromo-2,3,6,7-tetrahydrobenzo[1,2-b:4,5-b']difuran-4-yl)-2-aminoethane
2C-B-NBOMe, 2,5B-NBOMe	2-(4-bromo-2,5-dimethoxyphenyl)-N-[(2-methoxyphenyl)methyl]ethanamine; OR 2,5-Dimethoxy-4-bromo-N-(2-methoxybenzyl)phenethylamine

Trade or Other Name	Chemical Compound
2CBCB-NBOMe	N-(2-methoxybenzyl)-1-[(7R)-3-bromo-2,5-dimethoxybicyclo[4.2.0]octa-1,3,5-trien-7-yl]methanamine
2C-C-NBOMe, 2,5C-NBOMe	2-(4-chloro-2,5-dimethoxyphenyl)-N-[(2-methoxyphenyl)methyl]ethanamine; OR 2,5-Dimethoxy-4-chloro-N-(2-methoxybenzyl)phenethylamine
2C-H-NBOMe, 2,5H-NBOMe	2-(2,5-dimethoxyphenyl)-N-[(2-methoxyphenyl)methyl]ethanamine
2C-I-NBOH, 2,5I-NBOH	N-(2-Hydroxybenzyl)-4-iodo-2,5-dimethoxyphenethylamine
2C-I-NBOMe, 2,5INBOMe, 2,5I-NBOMe, 25I-NBOMe, NBOMe-2C-I, BOM-CI	2-(4-iodo-2,5-dimethoxyphenyl)-N-[(2-methoxyphenyl)methyl]ethanamine; OR 2,5-Dimethoxy-4-iodo-N-(2-methoxybenzyl)phenethylamine
2C-T-2	2,5-Dimethoxy-4-ethylthiophenethylamine; OR 2-[4-(Ethylthio)-2,5-dimethoxyphenyl]ethanamine
2C-T-4	2,5-Dimethoxy-4-isopropylthiophenethylamine; OR 2-[4-(Isopropylthio)-2,5-dimethoxyphenyl]ethanamine
2C-T-7	2,5-Dimethoxy-4-(n)-propylthiophenethylamine; OR 2, 5-Dimethoxy-4-(n)-propylthiophenethylamine; OR 2,5-dimethoxy-4(n) propylthiophenethylamine
2C-TFM-NBOMe	2-(4-trifluoromethyl-2,5-dimethoxyphenyl)-N-[(2-methoxyphenyl)methyl]ethanamine
25I-NBF	2-(4-iodo-2,5-dimethoxyphenyl)-N-[(2-fluorophenyl)methyl]ethanamine
25I-NBMD, NBMD-2C-I, Cimbi-29	2-(4-iodo-2,5-dimethoxyphenyl)-N-[(2,3-methylenedioxyphenyl)methyl]ethanamine
3C-B-FLY	2-(4-bromo-2,3,6,7-tetrahydrofurobensofuran-8-yl)-1-methyl-ethylamine
4-CAB, AEPCA	4-Chlorophenylisobutylamine; OR 1-(4-chlorophenyl)butan-2-amine; OR 4-chloro-α-ethylphenethylamine
4-FA, PAL-303, Flux, Flits, R2D2	para-fluoroamphetamine; OR 4-fluoroamphetamine; OR (RS)-1-(4-Fluorophenyl)propan-2-amine
5-APB	5-(2-Aminopropyl)benzofuran
5-APDB	5-(2-Aminopropyl)-2,3-dihydrobenzofuran
6-APB; Benzofury	6-(2-aminopropyl)benzofuran; OR 1-benzofuran-6-ylpropan-2-amine

Trade or Other Name	Chemical Compound
6-APDB	6-(2-Aminopropyl)-2,3,-dihydrobenzofuran
APB	((2-aminopropyl)benzofuran); OR [(2-aminopropyl)benzofuran]; OR (2-aminopropyl)benzofuran
APDB	((2-aminopropyl)-2,3-dihydrobenzofuran); OR [(2-aminopropyl)-2,3-dihydrobenzofuran]; OR (2-aminopropyl)-2,3-dihydrobenzofuran
bromo-dragonFLY	1-(4-Bromofuro[2,3-f][1]benzofuran-8-yl)propan-2-amine; OR bromo-benzodifuranyl-isopropylamine
DOB	2,5-Dimethoxy-4-bromoamphetamine; OR 1-(4-Bromo-2,5-dimethoxyphenyl)-2-aminopropane
DOC	2,5-Dimethoxy-4-chloroamphetamine; OR 1-(4-chloro-2,5-dimethoxy-phenyl)propan-2-amine; OR 4-chloro-2,5-dimethoxyamphetamine
DOET	2,5-dimethoxy-4-ethylamphetamine
DOI	2,5-dimethoxy-4-iodoamphetamine; OR 1-(2,5-dimethoxy-4-iodophenyl)-propan-2-amine; OR 4-iodo-2,5-dimethoxyamphetamine
DOM, STP	4-methyl-2,5-dimethoxy-amphetamine; OR 4-methyl-2,5-dimethoxy-a-methylphenethylamine
Fluoroamphetamine	
MDA	3,4-methylenedioxy amphetamine
MDMA	3,4-methylenedioxymethamphetamine
MDE, MDEA	3,4-methylenedioxy-N-ethylamphetamine; OR N-ethylalphamethyl-3,4(methylenedioxy)phenethylamine
Mescaline	3,4,5-trimethoxyphenethylamine
Mescaline-NBOMe	N-(2-Methoxybenzyl)-2-(3,4,5-trimethoxyphenyl)ethanamine; OR 3,4,5-trimethoxy-N-(2-methoxybenzyl)phenethylamine
MMDA	5-methoxy-3,4-methylenedioxy-amphetamine
	N,N-dimethylamphetamine
PMMA, 4-MMA	para-Methoxy-N-methylamphetamine; OR 4-methoxy-Nmethylamphetamine; OR 1-(4-methoxyphenyl)-N-methylpropan-2-amine
TMA	3,4,5-trimethoxyamphetamine
MBDB	Methylbenzodioxolylbutanamine; OR 3,4-Methylenedioxy-N-methylbutanamine
	2,5-Dimethoxyamphetamine
	Fluoromethamphetamine

Trade or Other Name	Chemical Compound
PMA	4-Methoxyamphetamine; OR P-methoxy-alpha-methylphenethylamine,
EMA	N-Ethylamphetamine OR N-ethyl-α-methyl-benzeneethanamine
Fenethylline	(RS)-1,3-dimethyl-7-[2-(1-phenylpropan-2-ylamino)ethyl]purine-2,6-dione
	3,4-Methylenedioxy-N-hydroxyamphetamine
	5-Methoxy-3,4-methylenedioxyamphetamine
4-APB	4-(2-Aminopropyl)benzofuran
7-APB	7-(2-Aminopropyl)benzofuran
4-APDB	4-(2-Aminopropyl)-2,3-dihydrobenzofuran
7-APDB	7-(2-Aminopropyl)-2,3-dihydrobenzofuran
4-MAPB	4-(2-Methylaminopropyl)benzofuran
5-MAPB	5-(2-Methylaminopropyl)benzofuran
6-MAPB	6-(2-Methylaminopropyl)benzofuran
7-MAPB	7-(2-Methylaminopropyl)benzofuran
5-EAPB	5-(2-Ethylaminopropyl)benzofuran
5-MAPDB	5-(2-Methylaminopropyl)-2,3-dihydrobenzofuran
MAPDB	(N-methyl aminopropyl)-2,3-dihydrobenzofuran
Ephenidine	N-ethyl-1,2-diphenylethylamine
4F-MPH, 4-fluoromethylphenidate	Methyl 2-(4-fluorophenyl)-2-(2-piperidinyl)acetate

SECTION VI. N-BENZYL PHENETHYLAMINE COMPOUNDS.[9]

[The state code provision containing Schedule 1 substances] is hereby amended to list the following class of N-benzyl phenethylamine compounds.

1) Unless specifically excepted or unless listed in another schedule, or contained within a pharmaceutical product approved by the United States Food and Drug Administration, any material, compound, mixture, or preparation, including its salts, isomers, esters, or ethers, and salts of isomers, esters, or ethers, whenever the existence of such salts is

[9] Section VI is based upon Fla. Stat. Ann. § 893.03, for the same reasons as stated in the footnotes to Sections III and IV. As with those sections, NAMSDL augments the Florida language with additional individual substances listed in the prior model document and/or D.C. Mun. Regs. Subt. 22-B, § 1201.

possible within any of the following specific chemical designations, any compound containing a phenethylamine structure without a beta-keto group, with substitution on the nitrogen atom of the amino group with a benzyl substituent, with or without substitution on the phenyl or benzyl ring to any extent with alkyl, alkoxy, thio, alkylthio, halide, fused alkylenedioxy, fused furan, fused benzofuran, or fused tetrahydropyran substituents, whether or not further substituted on a ring to any extent, with or without substitution at the alpha position by any alkyl substituent.

2) Examples include, but are not limited to, the following:

Trade or Other Name	**Chemical Compound**
25B-NBOMe	4-Bromo-2,5-dimethoxy-[N-(2-methoxybenzyl)]phenethylamine
25B-NBOH	(4-Bromo-2,5-dimethoxy-[N-(2-hydroxybenzyl)]phenethylamine)
25B-NBF	(4-Bromo-2,5-dimethoxy-[N-(2-fluorobenzyl)]phenethylamine)
25B-NBMD	(4-Bromo-2,5-dimethoxy-[N-(2,3-methylenedioxybenzyl)]phenethylamine)
25I-NBOMe	(4-Iodo-2,5-dimethoxy-[N-(2-methoxybenzyl)]phenethylamine)
25I-NBOH	(4-Iodo-2,5-dimethoxy-[N-(2-hydroxybenzyl)]phenethylamine)
25I-NBF	(4-Iodo-2,5-dimethoxy-[N-(2-fluorobenzyl)]phenethylamine)
25I-NBMD	(4-Iodo-2,5-dimethoxy-[N-(2,3-methylenedioxybenzyl)]phenethylamine).
25T2-NBOMe	(4-Methylthio-2,5-dimethoxy-[N-(2-methoxybenzyl)]phenethylamine).
25T4-NBOMe	(4-Isopropylthio-2,5-dimethoxy-[N-(2-methoxybenzyl)]phenethylamine).
25T7-NBOMe	(4-(n)-Propylthio-2,5-dimethoxy-[N-(2-methoxybenzyl)]phenethylamine).
25C-NBOMe	(4-Chloro-2,5-dimethoxy-[N-(2-methoxybenzyl)]phenethylamine).
25C-NBOH	(4-Chloro-2,5-dimethoxy-[N-(2-hydroxybenzyl)]phenethylamine).
25C-NBF	(4-Chloro-2,5-dimethoxy-[N-(2-fluorobenzyl)]phenethylamine).
25C-NBMD	(4-Chloro-2,5-dimethoxy-[N-(2,3-methylenedioxybenzyl)]phenethylamine).
25H-NBOMe	(2,5-Dimethoxy-[N-(2-methoxybenzyl)]phenethylamine).
25H-NBOH	(2,5-Dimethoxy-[N-(2-hydroxybenzyl)]phenethylamine).
25H-NBF	(2,5-Dimethoxy-[N-(2-fluorobenzyl)]phenethylamine).
25D-NBOMe	(4-Methyl-2,5-dimethoxy-[N-(2-methoxybenzyl)]phenethylamine)

Trade or Other Name	Chemical Compound
25E-NBOMe	2-(2,5-Dimethoxyphenyl-4-ethyl)-N-(2-methoxybenzyl)ethanamine

SECTION VII. SUBSTITUTED TRYPTAMINES.[10]

[The state code provision containing Schedule 1 substances] is hereby amended to list the following class of substituted tryptamines.

1) This includes any compound, unless specifically excepted, specifically named in this schedule, or listed under a different schedule, structurally derived from 2-(1H-indol-3-yl)ethanamine (i.e., tryptamine) by mono- or di-substitution of the amine nitrogen with alkyl or alkenyl groups or by inclusion of the amino nitrogen atom in a cyclic structure whether or not the compound is further substituted at the alphaposition with an alkyl group or whether or not further substituted on the indole ring to any extent with any alkyl, alkoxy, halo, hydroxyl, or acetoxy groups.
2) Examples of this class include, but are not limited to, the following:

Trade or Other Name	Chemical Compound
4-AcO-DET	3-(2-Diethylaminoethyl)-1H-indol-4-yl acetate
4-AcO-DMT, OAcetylpsilocin	4-acetoxy-N,N-dimethyltryptamine or 3-[2-(dimethylamino)ethyl]-1H-indol-4-ol-4-acetate
4-AcO-DPT	4-acetoxy-N,N-dipropyltryptamine
4-AcO-DiPT	4-Acetoxy-N,N-diisopropyltryptamine
4-Hydroxy-DET	4-Hydroxy-N,N-diethyltryptamine
4-HO-DiPT	4-Hydroxy-di-isopropyl-tryptamine; OR 3-[2-(diisopropylamino)ethyl]-1H-indol-4-ol; OR 4-HydroxyN,N-diisopropyltryptamine
4-HO-MET	4-hydroxy-N-methyl-N-ethyltryptamine
4-HO-MiPT	3-(2-[Isopropyl(methyl)amino]ethyl)-1H-indol-4-ol

[10] Section VII uses model language originating from Section Three of the NAMSDL model document published in 2014. In addition, NAMSDL augments that model language with additional individual substances listed in either Fla. Stat. Ann. § 893.03 or D.C. Mun. Regs. Subt. 22-B, § 1201.

Trade or Other Name	Chemical Compound
4-HO-MPMI	(R)-3-(N-methylpyrrolidin-2-ylmethyl)-4-hydoxyindole
4-HO-MPT	3-{2-[methyl(propyl)amino]ethyl}-1H-indol-4-ol; OR 4-hydroxy-N-methyl-N-propyltryptamine
4-MeO-MiPT	4-methoxy-N-methyl-N-isopropyltryptamine; OR 3-[2-(Isopropylmethylamino)ethyl]-4-methoxyindole
4-methyl-aET	4-Methyl-α-ethyltryptamine; OR 1-ethyl-2-(4-methyl-1Hindol-3-yl)-ethylamine
5-MeO-AMT	1-(5-methoxy-1H-indol-3-yl)propan-2-amine
5-MeO-DALT	N,N-diallyl-5-methoxytryptamine; OR N-allyl-N-[2-(5-methoxy-1H-indol-3-yl)ethyl]prop-2-en-1-amine
5-MeO-DET	N,N-Dethyl-5-Methoxytryptamine
5-MeO-DiPT	5-methoxy-diisopropyltryptamine; OR 3-[2-(Diisopropylamino)ethyl]-5-methoxyindole; OR 5-methoxyN,N-diisopropyltryptamine
5-MeO-DMT	5-methoxy-N,N-dimethyltryptamine; OR 2-(5-methoxy-1Hindol-3-yl)-N,N-dimethylethanamine; OR 5-methoxy-N,Ndimethyltryptamine; OR 5-methoxy-N,Ndimethyltryptamine; OR 5-methoxy-3-2[2-(dimethylamino)ethyl]indole
5-MeO-DPT	N-[2-(5-methoxy-1H-indol-3-yl)ethyl]-N-propylpropan-1-amine
5-MeO-MiPT, Moxy, Moxie	N-[2-(5-methoxy-1H-indol-3-yl)ethyl]-N-methylpropan-2-amine
5-MeO-MPMI	(R)-3-(N-methylpyrrolidin-2-ylmethyl)-5-methoxyindole
Bufotenine	3-(Beta-Dimethyl-aminoethyl)-5-hydroxyindole; OR 3-(2-dimethylaminoethyl)-5-indolol; OR N,N-dimethylserotonin; OR 5-hydroxy-N,N-dimethyltryptamine
DET	Diethyltryptamine; OR N,N-Diethyltryptamine
DiPT	N,N-Diisopropyltryptamine; OR Diisopropyltryptamine; OR N,N-diisopropyltryptamine; OR 3-[2-(diisopropylamino)ethyl]indole
DMT	Dimethyltryptamine OR 3-(2-(Dimethylamino)ethyl)indole
DPT	N,N-Dipropyltryptamine; OR Dipropyltryptamine; OR 3-[2-(dipropylamino)ethyl]indole

Trade or Other Name	**Chemical Compound**
Methyltryptamine, NMT	N-methyltryptamine; OR 2-(1H-Indol-3-yl)-Nmethylethanamine
MiPT	N-isopropyl-N-methyltryptamine
Psilocyn	
α-ET	Alpha-Ethyltryptamine OR **α-ethyl-1H-indole-3-ethanamine OR 3-Indolybutylamine**
MET	N-Methyl-N-ethyltryptamine
DALT	N,N-Diallyltryptamine
EiPT	N-Ethyl-N-isopropyltryptamine
5-Hydroxy-AMT	5-Hydroxy-alpha-methyltryptamine
	5-Hydroxy-N-methyltryptamine
5-Me-DMT	(5-Methyl-N,N-dimethyltryptamine)
	Methyl-alpha-ethyltryptamine
Bromo-DALT	(Bromo-N,N-diallyltryptamine)
	2-(1H-indol-3-yl)-N-methyl-ethanamine
	N-(2-(1H-indol-3-yl)ethyl-N-methylpropan-2-amine
	N-[2-(1H-indol-3-yl)ethyl]-N-isopropylpropan-2-amine
	N,N-dipropyl-1H-indole-3-ethanamine
	3-[2-(diethylamino)ethyl]-1H-4yl acetate
	3-(2-[isopropyl(methyl)amino]ethyl)-1H-indol-4-ol
	3-[2-(bis[1-methylethyl]amino)ethyl]-1H-indol-4-ol acetate
	3-(2-[isopropyl(methyl)amino]ethyl)-1H-indol-4-ol acetate
	3-[2-(dimethylamino)ethyl]-1H-indol-4-yl acetate
	4-hydroxy-N,N-diethyl-1H-indole-ethanamine
	4-methoxy-N,N-dimethyl-1H-indole-3-ethanamine
	3-(2-(diisopropylamino)ethyl)-1H-indol-4-ol
	3-[2-(ethyl[methyl]amino)ethyl]-1H-indol-4-yl acetate
	3-(2-(dipropylamino)ethyl)-1H-indol-4-ol
	3-[2-(dipropylamino)ethyl]-1H-indol-4-yl acetate
	4-acetoxy-N,N-di-2-propen-1-yl-1H-indole-3-ethanamine
	5-methoxy-N,N-di-2-propen-1-yl-1H-indole-3-ethanamine
	3-(2-(dimethylaminoethyl)-1H-indol-5-ol;
	2-(5-methoxy-1H-indol-3-yl)-N,N-dimethylethanamine
	N-[2-(5-methoxy-1H-indol-3-yl)ethyl]-N-methylpropyl

Trade or Other Name	Chemical Compound
	1-(5-methoxy-1H-indol-3-yl)propan-2-amine
	3-[2-(dimethylamino)-ethyl]-1H-indol-5-yl acetate
	N-[2-(5-methoxy-1H-indol-3-yl)ethyl]-N-propylpropan-1-amine
	N,N-diethyl-2-(5-methoxy-1H-indol-3-yl)ethanamine
	N-ethyl-2-(5-methoxy-1H-indol-3-yl)-N-methyl-ethanamine
5-MeO-EIPT	5-methoxy-N-ethyl-N-isopropyltryptamine
4-AcO-DALT	**4-acetyloxy-N,N-diallyltryptamine**
4-hydroxy-MiPT	**4-hydroxy-N,N-methylisopropyltryptamine**

SECTION VIII. SUBSTITUTED PHENYLCYCLOHEXYLMINES.[11]

[The state code provision containing Schedule 1 substances] is hereby amended to list the following class of substituted phenylcyclohexylamines.

1) Unless specifically excepted or unless listed in another schedule, or contained within a pharmaceutical product approved by the United States Food and Drug Administration, any material, compound, mixture, or preparation containing a phenylcyclohexylamine structure, with or without any substitution on the phenyl ring, any substitution on the cyclohexyl ring, any replacement of the phenyl ring with a thiophenyl or benzothiophenyl ring, with or without substitution on the amine with alkyl, dialkyl, or alkoxy substituents, inclusion of the nitrogen in a cyclic structure, or any combination of the above.
2) Examples of this class include, but are not limited to, the following:

Trade or Other Name	Chemical Compound
BTCP	Benzothiophenylcyclohexylpiperidine
BCP	Benocyclidine

[11] Section VIII is based upon Fla. Stat. Ann. § 893.03, for the same reasons as stated in the footnotes to Sections III and IV. As with those sections, NAMSDL augments the Florida language with additional individual substances listed in the prior model document and/or D.C. Mun. Regs. Subt. 22-B, § 1201

Trade or Other Name	**Chemical Compound**
PCE (Ethylamine analog of phencyclidine)	N-Ethyl-1-phenylcyclohexylamine
PCPY (Pyrrolidine analog of phencyclidine)	N-(1-Phenylcyclohexyl)-pyrrolidine)
PCPr	Phenylcyclohexylpropylamine
TCP (Thiophene analog of phencyclidine)	1-[1-(2-Thienyl)-cyclohexyl]-piperidine)
PCEEA	(Phenylcyclohexyl(ethoxyethylamine)
PCMPA	(Phenylcyclohexyl(methoxypropylamine)
Methoxetamine	
Methoxetamine, MXE, 3-MeO-2-Oxo-PCE	(RS)2-(3-methoxyphenyl)-2-(ethylamino)cyclohexanone
3-Methoxy-PCE	(3-Methoxyphenyl)cyclohexylethylamine N-ethyl-1-(3-methoxyphenyl)cyclohexylamine
3-MeO-PCE	3-Methoxyeticyclidine
Bromo-PCP	(Bromophenyl)cyclohexylpiperidine
Chloro-PCP	(Chlorophenyl)cyclohexylpiperidine
Fluoro-PCP	(Fluorophenyl)cyclohexylpiperidine
Hydroxy-PCP	(Hydroxyphenyl)cyclohexylpiperidine
Methoxy-PCP	(Methoxyphenyl)cyclohexylpiperidine
Methyl-PCP	(Methylphenyl)cyclohexylpiperidine
Nitro-PCP	(Nitrophenyl)cyclohexylpiperidine
Oxo-PCP	(Oxophenyl)cyclohexylpiperidine
Amino-PCP	(Aminophenyl)cyclohexylpiperidine

SECTION IX. FENTANYL DERIVATIVES.[12]

[The state code provision containing Schedule 1 substances] is hereby amended to list the following class of fentanyl derivatives.

[Option 1]

1) Unless specifically excepted, listed in another schedule, or contained within a pharmaceutical product approved by the United States Food and Drug Administration, any material, compound, mixture, or preparation, including its salts, isomers, esters, or ethers, and salts of isomers, esters, or ethers, whenever the existence of such salts is possible within any of the following specific chemical designations containing a 4–anilidopiperidine structure:
    a. With or without substitution at the carbonyl of the aniline moiety with alkyl, alkenyl, carboalkoxy, cycloalkyl, methoxyalkyl, cyanoalkyl, or aryl groups, or furanyl, dihydrofuranyl, benzyl moiety, or rings containing heteroatoms sulfur, oxygen, or nitrogen;
    b. With or without substitution at the piperidine amino moiety with a phenethyl, benzyl, alkylaryl (including heteroaromatics), alkyltetrazolyl ring, or an alkyl or carbomethoxy group, whether or not further substituted in the ring or group;
    c. With or without substitution or addition to the piperdine ring to any extent with one or more methyl, carbomethoxy, methoxy, methoxymethyl, aryl, allyl, or ester groups;
    d. With or without substitution of one or more hydrogen atoms for halogens, or methyl, alkyl, or methoxy groups, in the aromatic ring of the anilide moiety;

[12] Over the past several years, states have begun to add fentanyl-related structural classes to their respective lists of Schedule I controlled substances in a variety of ways. In addition, in February 2018, the U.S. Drug Enforcement Administration issued a temporary scheduling order to schedule fentanyl-related substances in federal Schedule I for at least two years. Section IX contains four options for Subsection (1), which show fentanyl-class scheduling language from four different jurisdictions. Option 1 is based upon language in Fla. Stat. Ann. § 893.03(1)(a)(62). Option 2 is based on language in N. Dakota Cen. Code § 19-03.1-05(3)(xx) . Option 3 is based on Ken. Rev. Stat. § 218A.010(16). Option 4 is based on the U.S. Drug Enforcement Administration's February 6, 2018, temporary scheduling order, located at 83 FR 5188. Subsection (2) contains other fentanyl-related substances that have been scheduled as individual substances by one or more jurisdictions in 2018.

e. With or without substitution at the alpha or beta position of the piperidine ring with alkyl, hydroxyl, or methoxy groups;
f. With or without substitution of the benzene ring of the anilide moiety for an aromatic heterocycle; and
g. With or without substitution of the piperidine ring for a pyrrolidine ring, perhydroazepine ring, or azepine ring;
h. excluding, Alfentanil, Carfentanil, Fentanyl, and Sufentanil;
i. including, but not limited to:
    i. Acetyl-alpha-methylfentanyl,
    ii. Alpha-methylfentanyl (N–[1–(alpha–methyl–betaphenyl) ethyl–4–piperidyl] propionanilide; 1–(1–methyl–2–phenylethyl)–4–(N–propanilido) piperidine),
    iii. Alpha-methylthiofentanyl,
    iv. Benzylfentanyl,
    v. Beta-hydroxyfentanyl,
    vi. Beta–hydroxy–3–methylfentanyl,
    vii. 3–Methylfentanyl (N–[3–methyl–1–(2–phenylethyl)–4–piperidyl]–N–phenylpropanamide),
    viii. 3–Methylthiofentanyl,
    ix. Para–Fluorofentanyl,
    x. Thenylfentanyl or Thienyl fentanyl,
    xi. Thiofentanyl,
    xii. Acetylfentanyl,
    xiii. Butyrylfentanyl,
    xiv. Beta–Hydroxythiofentanyl,
    xv. Lofentanil,
    xvi. Ocfentanil,
    xvii. Ohmfentanyl,
    xviii. Benzodioxolefentanyl,
    xix. Furanyl fentanyl,

xx. Pentanoyl fentanyl,

xxi. Cyclopentyl fentanyl,

xxii. Isobutyryl fentanyl,

xxiii. Remifentanil.

[Option 2]

1) Unless specifically excepted or unless listed in another schedule or are not FDA approved drugs, and are derived from N-(1-(2-Phenylethyl)-4-piperidinyl)-N-phenylpropanamide (Fentanyl) by any substitution on or replacement of the phenethyl group, any substitution on the piperidine ring, any substitution on or replacement of the propanamide group, any substitution on the anilido phenyl group, or any combination of the above. Examples include:

   a. N-[1-(1-methyl-2-phenethyl)-4-piperidinyl]-N-phenylacetamide (also known as Acetyl-alpha-methylfentanyl).

   b. N-[1-(alpha-methyl-beta-phenyl)ethyl-4-piperidyl]propionanilide; 1-(1-methyl-2-phenylethyl)-4-(N-propanilido)piperidine (also known as Alpha-methylfentanyl).

   c. N-[1-methyl-2-(2-thienyl)ethyl-4-piperidinyl]-N-phenylpropanamide (also known as Alpha-methylthiofentanyl).

   d. N-[1-(2-hydroxy-2-phenethyl)-4-piperidinyl]-N-phenylpropanamide (also known as Beta-hydroxyfentanyl).

   e. N-[1-(2-hydroxy-2-phenethyl)-3-methyl-4-piperidinyl]-N-phenylpropanamide (also known as Beta-hydroxy-3-methylfentanyl).

   f. N-[3-methyl-1-(2-phenylethyl)-4-piperidyl]-N-phenylpropanamide (also known as 3-Methylfentanyl).

   g. N-[3-methyl-1-(2-thienyl)ethyl-4-piperidinyl]-N-phenylpropanamide (also known as 3-Methylthiofentanyl).

   h. N-(4-fluorophenyl)-N-[1-(2-phenethyl)-4-piperidinyl]propanamide (also known as Para-fluorofentanyl).

   i. N-phenyl-N-[1-(2-thienyl)ethyl-4-piperidinyl]propanamide (also known as Thiofentanyl).

j. N-(1-phenylethylpiperidin-4-yl)-N-phenylfuran-2-carboxamide (also known as Furanyl Fentanyl).

k. N-(1-phenethylpiperidin-4-yl)-N-phenylbutyramide; N-(1-phenethylpiperidin-4-yl)-N-phenylbutanamide (also known as Butyryl Fentanyl).

l. N-[1-[2-hydroxy-2-(thiophen-2-yl)ethyl]piperidin-4-yl]-N-phenylpropionamide; N-[1-[2-hydroxy-2-(2-thienyl)ethyl]-4-piperidinyl]-N-phenylpropanamide (also known as Beta-Hydroxythiofentanyl).

m. N-(1-phenethylpiperidin-4-yl)-N-phenylacetamide (also known as Acetyl Fentanyl).

n. N-phenyl-N-[1-(2-phenylethyl)piperidin-4-yl]prop-2-enamide (also known as Acrylfentanyl).

o. N-phenyl-N-[1-(2-phenylethyl)-4-piperidinyl]-pentanamide (also known as Valeryl Fentanyl).

[Option 3]

1) "Fentanyl derivative" means a substance containing any quantity of any chemical compound, except compounds specifically scheduled as controlled substances by statute or by administrative regulation pursuant to this chapter, which is structurally derived from 1–ethyl–4–(N–phenylamido) piperidine:

   a. By substitution:

      i. At the 2–position of the 1–ethyl group with a phenyl, furan, thiophene, or ethyloxotetrazole ring system; and

      ii. Of the terminal amido hydrogen atom with an alkyl, alkoxy, cycloalkyl, or furanyl group; and

   b. Which may be further modified in one (1) or more of the following ways:

      i. By substitution on the N-phenyl ring to any extent with alkyl, alkoxy, haloalkyl, hydroxyl, or halide substituents;

      ii. By substitution on the piperadine ring to any extent with alkyl, allyl, alkoxy, hydroxy, or halide substituents at the 2-, 3-, 5-, and/or 6-positions;

iii. By substitution on the piperadine ring to any extent with a phenyl, alkoxy, or carboxylate ester substituent at the 4- position; or

iv. By substitution on the 1–ethyl group to any extent with alkyl, alkoxy, or hydroxy substituents.

[Option 4]

1) "Fentanyl-related substance" means any substance not otherwise listed [in the controlled substance schedules], and for which no exemption or approval is in effect under section 505 of the Federal Food, Drug, and Cosmetic Act [21 U.S.C. 355], that is structurally related to fentanyl by one or more of the following modifications:
    a. Replacement of the phenyl portion of the phenethyl group by any monocycle, whether or not further substituted in or on the monocycle;
    b. Substitution in or on the phenethyl group with alkyl, alkenyl, alkoxyl, hydroxyl, halo, haloalkyl, amino or nitro groups;
    c. Substitution in or on the piperidine ring with alkyl, alkenyl, alkoxyl, ester, ether, hydroxyl, halo, haloalkyl, amino or nitro groups;
    d. Replacement of the aniline ring with any aromatic monocycle whether or not further substituted in or on the aromatic monocycle; and/or
    e. Replacement of the N-propionyl group by another acyl group.
2) Additional examples of fentanyl-derivative substances include:
    a. N-(1-phenethylpiperidin-4-yl)-N-phenylbutyramide, (Other names: Butyryl fentanyl);
    b. N-[1-[2-hydroxy-2-(thiophen-2-yl)ethyl]piperidin-4-yl]-N-phenylpropionamide (Other names: beta-hydroxythiofentanyl);
    c. N-(1-phenethylpiperidin-4-yl)-N-phenylfuran-2-carboxamide, (Other name: Furanyl fentanyl);
    d. N-(4-fluorophenyl)-N-(1-phenethylpiperidin-4-yl)isobutyramide, (Other names: 4-fluoroisobutyryl fentanyl, para-fluoroisobutyryl fentanyl);
    e. N-(1-phenethylpiperidin-4-yl)-N-phenylacrylamide, (Other names: acryl fentanyl, acryloylfentanyl);
    f. N-(2-fluorophenyl)-N-(1-phenethylpiperidin-4-yl)propionamide, (Other names:

ortho-fluorofentanyl, 2-fluorofentanyl);

g. N-(1-phenethylpiperidin-4-yl)-N-phenyltetrahydrofuran-2-carboxamide, (Other name: tetrahydrofuranyl fentanyl);

h. 2-methoxy-N-(1-phenethylpiperidin-4-yl)-N-phenylacetamide (Other name: methoxyacetyl fentanyl);

i. N-(1-phenethylpiperidin-4-yl)-N-phenylcyclopropanecarboxamide, (Other name: cyclopropyl fentanyl);

j. N-(1-phenethylpiperidin-4-yl)-N-phenylpentanamide (Other name: Valeryl fentanyl);

k. N-(4-fluorophenyl)-N-(1-phenethylpiperidin-4-yl)butyramide, its isomers, esters, ethers, salts and salts of isomers, esters and ethers (Other name: para-fluorobutyryl fentanyl);

l. N-(4-methoxyphenyl)-N-(1-phenethylpiperidin-4-yl)butyramide, (Other name: para-methoxybutyryl fentanyl);

m. N-(4-chlorophenyl)-N-(1-phenethylpiperidin-4-yl)isobutyramide, (Other name: para-chloroisobutyryl fentanyl);

n. N-(1-phenethylpiperidin-4-yl)-N-phenylisobutyramide, (Other name: isobutyryl fentanyl);

o. N-(1-phenethylpiperidin-4-yl)-N-phenylcyclopentanecarboxamide (Other name: cyclopentyl fentanyl;

p. N-(2-fluorophenyl)-2-methoxy-N-(1-phenethylpiperidin-4-yl)acetamide, (Other name: Ocfentanil);

q. Butyrfentanyl (N-phenyl-N-[l-(2-phenylethyl)-4-pyridinyl]butyramide);

r. Beta-Hydroxythiofentanyl (N-phenyl-N-{l-[2-hydroxy-2-(2-thienyl)ethyl)-4-piperdinyl}-propanamide);

s. 4-methylphenethyl acetyl fentanyl (N-phenyl-N-{l-[2-(4-methylphenyl)ethyl]-4- piperdinyl}-acetamide);

t. 3-Allylfentanyl (N-phenyl-N-[1-(2-phenylethyl)-(3s,4R)-3-prop-2-enyl-4-piperidinyl]-propanamide);

u. Benzodioxole fentanyl (N-phenyl-N-[1-(2-phenylethyl)-4-piperidinyl]-

benzo[d] [1,3]dioxole-5-carboxamide);

v. Benzyl carfentanil (N-phenyl-N-(1-benzyl-4-methylcarboxylate-4-piperidinyl)-propanamide);

w. Brifentanil (N-(2-fluorophenyl)-N-{(3R,4S)-1-[2-(4-ethyl-5-oxotetrazol-1-yl)ethyl]-3-methyl-4-piperdinyl}-2-methoxyacetamide);

x. Cyclopentylfentanyl (N-phenyl-N-[1-(2-phenylethyl)-4-piperidinyl)-cyclopentanecarboxamide);

y. 2,5-Dimethylfentanyl (N-phenyl-N-[1-(2-phenylethyl)-2,5-dimethyl-4-piperidinyl]-propranamide);

z. 4-Fluoroisobutyryl fentanyl (N-(4-fluorophenyl)-N-[1-(2-phenylethyl)-4-piperidinyl)-isobutyramide);

aa. Furanylethyl fentanyl (N-phenyl-N-[1-(2-furanylethyl)-4-piperidinyl]-propanamide);

bb. Isobutyryl fentanyl (N-phenyl-N-[1-(2-phenylethyl)-4-piperdinyl]-2-methylpropanamide);

cc. Lofentanil (N-phenyl-N-[1-(2-phenylethyl)-(3R,4S)-3-methyl-4-methylcarboxylate-4-piperidinyl]-propanamide);

dd. 4-Methoxybutyrfentanyl (N-(4-methoxyphenyl)-N-[1-(2-phenylethyl)-4-piperidinyl]-butyramide);

ee. 4-Methoxymethylfentanyl (N-phenyl-N-[1-(2-phenylethyl)-4-methoxymethyl-4- piperidinyl]-propanamide);

ff. Meta-fluorobutyryl fentanyl (N-(3-fluorophenyl)-N-[1-(2-phenylethyl)-4-piperidnyl)-butyramide);

gg. Meta-fluorofentanyl (N-(3-fluorophenyl)-N-[1-(2-phenylethyl)-4-piperidnyl)-propanamide);

hh. 3-Methylbutyrfentanyl (N-phenyl-N-[1-(2-phenylethyl)-4-piperidinyl]-butyramide);

ii. N-Methylcarfentanyl (N-phenyl-N-(1-methyl-4-methylcarboxylate-4-piperidinyl)- propanamide);

jj. Mirfentanyl (N-(2-pyrazinyl)-N-[1-(2-phenylethyl)-4-piperidinyl]-2-furamide);

kk. Ocfentanil (N-(2-fluorophenyl)-N-[1-(2-phenylethyl)-4-piperdinyl]-2-methoxyacetamide);

ll. Ohmefentanyl (N-phenyl-N-[1-(2-hydroxy-2-phenylethyl)-3-methyl-4-piperidinyl]-propanamide);

mm. Ortho-fluorobutyryl fentanyl (N-(2-fluorophenyl)-N-[1-(2-phenylethyl)-4-piperidnyl)-butyramide);

nn. Ortho-fluorofentanyl (N-(2-fluorophenyl)-N-[1-(2-phenylethyl)-4-piperidnyl)-propanamide);

oo. Para-chlorofentanyl (N-(4-chlorophenyl)-N-[1-(2-phenylethyl)-4-piperidinyl]-propanamide);

pp. Para-chloroisobutyryl fentanyl (N-(4-chlorophenyl)-N-[1-(2-phenylethyl)-4-piperidinyl]-isobutyramide);

qq. 4-Fluorobutyryl fentanyl (N-(4-fluorophenyl)-N-[1-(2-phenylethyl)-4-piperidinyl]-butyramide);

rr. Para-methoxyfentanyl (N-(4-methoxyphenyl)-N-[1-(2-phenylethyl)-4-piperidinyl]-propanamide);

ss. Para-methylfentanyl (N-(4-methylphenyl)-N-[1-(2-phenylethyl)-4-piperidinyl]- propanamide);

tt. 4-Phenyl fentanyl (N-phenyl-N-[4-phenyl-1-(2-phenylethyl)-4-piperidinyl]-propanamide);

uu. Trefentanyl (N-(2-fluorophenyl)-N-{1-[2-(4-ethyl-5-oxo-4,5-dihydro-1H-tetrazol1-yl)ethyl]-4-phenyl-4-piperdinyl}-propanamide);

vv. Valeryl fentanyl (N-phenyl-N-[1-(2-phenylethyl)-4-piperidinyl]-pentanamide);

ww. Alpha-Methylacetylfentanyl (N-phenyl-N-[1-phenylpropan-2-yl)-4-piperidinyl]- acetamide);

xx. Alpha-Methylbutyrfentanyl (N-phenyl-N-[1-phenylpropan-2-yl)-4-piperidinyl]- butyramide);

yy. Alpha-Methylthiofentanyl (N-phenyl-N-[1-(1-thienyl-2-ylpropan-2-yl)-4-piperidinyl]-propanamide);

zz. Beta-Hydroxy fentanyl (N-phenyl-N-[1-(2-hydroxy-2-phenylethyl)-4-piperidinyl]-propanamide);

aaa. Beta-Methyl fentanyl (N-phenyl-N-[1-(2-phenylpropyl)-4-piperdinyl]-propanamide);

bbb. N-phenyl-N-[1-(2-phenylethyl)-4-piperidinyl]-2-butenamide (other name: Crotonyl fentanyl);

ccc. N-phenyl-N-[4-phenyl-1-(2-phenylethyl)-4-piperidinyl]-propanamide (other name: 4-phenylfentanyl);

ddd. N-phenyl-N-(1-methyl-4-piperidinyl)-propanamide (other name: N-methyl norfentanyl);

eee. N-(1-phenethylpiperidin-4-yl)-N,3-diphenylpropanamide (beta'-phenyl fentanyl; hydrocinnamoyl fentanyl);

fff. N-(1-phenethylpiperidin-4-yl)-N-phenylthiophene-2-carboxamide (thiofuranyl fentanyl);

ggg. N-(2-methylphenyl)-N-(1-phenethylpiperidin-4-yl)acetamide (ortho-methyl acetylfentanyl);

hhh. N-(1-(2-fluorophenethyl)piperidin-4-yl)-N-(2-fluorophenyl)propionamide (2'-fluoro ortho-fluorofentanyl);

iii. N-(4-methoxyphenyl)-N-[1-(2-phenylethyl)-4-piperidinyl]-butanamide (other name: 4-methoxybutyrylfentanyl);

jjj. N-phenyl-N-[1-(2-phenylethyl)-4-piperidinyl]-benzamide (other names: Phenyl fentanyl, Benzoyl fentanyl).

SECTION X. UNCLASSIFIED NPS.[13]

[The state code provision containing Schedule 1 substances] is hereby amended to list the following unclassified NPS.

Trade or Other Name	Chemical Compound
2-AI, 2-aminoindane	2,3-dihydro-1H-inden-2-amine
2-FMA	2-fluoromethamphetamine; OR (RS)-1-(2-fluorophenyl)-Nmethylpropan-2-amine
2-MeO-ketamine	methoxyketamine
3-HO-PCE	3-[1-(ethylamino)cyclohexyl]phenol
3-HO-PCP	3-hydroxyphencyclidine
3-MeO-PCP	1-[1-(3-methoxyphenyl)cyclohexyl]-piperidine; OR 3-methoxyphencyclidine
4-FMA	4-fluoromethamphetamine; OR (RS)-1-(4-fluorophenyl)-Nmethylpropan-2-amine
4-MeO-PCP, methoxydine	4-Methoxyphencyclidine; OR 1-[1-(4-methoxyphenyl)cyclohexyl]-piperidine
5-IAI	5-Iodo-2-aminoindane; OR 5-iodo-2,3-dihydro-1H-inden-2-amine
5-ME	5-methyl-ethylone
DBP, DBZP	1,4-Dibenzylpiperazine
Ethyl-ketamine	2-(2-chlorophenyl)-2-(ethylamino)cyclohexanone
Fluoromethamphetamine	
Fluorophenylpiperazine; pFPP; 4-FPP; fluoperazine; flipiperazine	Para-fluorophenylpiperazine; OR 1-(4-fluorophenyl)piperazine
Kratom	7-hydroxymitragynine
MCPP	1-(3-Chlorophenyl)piperazine, OR Chlorophenylpiperazine, OR meta-chlorophenylpiperazine; OR 1-(3-chlorophenyl)piperazine; OR 3-chlorophenylpiperazine
Methiopropamine, MPA	1-(thiophen-2-yl)-2-methylaminopropane
O-desmethyltramadol, O-DT	3-[2-(1-Amino-1-methylethyl)-1-hydroxycyclohexyl]phenol

[13] Section X uses model language contained in Section Three of the model document published in 2014. Here, NAMSDL augments that model language with additional individual substances listed in either Fla. Stat. Ann. § 893.03 or D.C. Mun. Regs. Subt. 22-B, § 1201.

Trade or Other Name	**Chemical Compound**
Phenazepam	7-Bromo-5-(2-chlorophenyl)-1,3-dihydro-2H-1,4-benzodiazepin-2-one
pMeOPP, MeOPP	1-(4-Methoxyphenyl)piperazine
pTFMPP	1-[4-(trifluoromethylphenyl)]piperazine
TFMPP	3-trifluoromethylphenylpiperazine; OR 1-[3-(trifluoromethyl)phenyl]piperazine; OR 1-(3-trifluoromethylphenyl) piperazine; OR 1-(3-trifluoromethylphenyl)piperazine; OR 1-(3-[trifluoromethylphenyl])piperazine
DMA	(±)-2,5-Dimethoxy-alpha-methylphenethylamine
N,N-DMA, Dimetamfetamine, Metrotonin	**N,N,α-trimethyl-benzeethanamine OR N,N-Dimethylamphetamine**
DMHP Dimethylheptylpyran;	6,6,9-Trimethyl-3-(3-methyl-2-octanyl)-7,8,9,10-tetrahydro-6H-benzo[c]chromen-1-ol
MDA, tenamfetamine (INN), Sally, Sass, Sass-a-frass;	Methylenedioxyamphetamine, OR 3,4-methylenedioxyamphetamine
N-hydroxy MDA, MDOH	**N-hydroxy-α-methyl-1,3-benzodioxole-5-ethanamine; OR N-Hydroxy-3,4-methylenedioxyamphetamine;**
4-F-a-PVP	1-(4-fluorophenyl)-2-(1-pyrrolidinyl)pentan-1-one
4-MeO-a-PVP	1-(4-methoxyphenyl)-2-(1-pyrrolidinyl)pentan-1-one
NEB	1-phenyl-2-ethylaminobutan-1-one
a-PHP	1-phenyl-2-(1-pyrrolidinyl)hexan-1-one
a-PHPP	1-phenyl-2-(1-pyrrolidinyl)heptan-1-one
a-PVT	1-(thiophen-2-yl)-2-(1-pyrrolidinyl)pentan-1-one
NENK	2-(2-chlorophenyl)-2-(ethylamino)cyclohexanone
α-MT	alpha-methyltryptamine OR **α-methyl-1H-indole-3-ethanamine;**
3,4-CTMP	methyl 2-(3,4-dichlorophenyl)-2-(piperdin-2-yl)
AH-7921	3,4-dichloro-N-((1-(dimethylamino)cyclohexyl)methyl) benzamide
	(4-ethyl-1-naphthalenyl)(1-pentyl-1H-indol-3-yl)methanone
	2-(2-methylphenyl)-1-(1-pentyl-1H-indol-3-yl)-ethanone
	1-[1-(2-cyclohexylethyl)-1H-indol-3-yl]-2-(2-methoxyphenyl)-Ethanone
	[1-(5-fluoropentyl)-1H-indol-3-yl](2-iodophenyl)methanone

Trade or Other Name	Chemical Compound
	(2-methyl-1-[(1-methylpiperidin-2-yl)methyl]-6-nitro-1H-indol-3-yl)methanone
	(1-butyl-1H-indol-3-yl)(4-methoxyphenyl)-methanone
W–15	4–chloro–N–[1–(2–phenylethyl)–2–piperidinylidene]–benzenesulfonamide
W–18	4–chloro–N–[1–[2–(4–nitrophenyl)ethyl]–2–piperidinylidene]–benzenesulfonamide
W–19	(Z)-N-{1-[2-(4-aminophenyl)ethyl]piperidin-2-ylidene}-4-chlorobenzenesulfonamide
U-47700	trans–3,4–dichloro–N–[2–(dimethylamino)cyclohexyl]–N–methyl–benzamide
MT–45	1–cyclohexyl–4–(1,2–diphenylethyl)–piperazine, dihydrochloride
W-1	4-chloro-N-[(2Z)-1-[2-(4-nitrophenyl)ethyl]piperidin-2-ylidene]benzene-1-sulfonamide
Deschloroketamine	2-Phenyl-2-(methylamino)cyclohexanone
Flubromazolam	(8-bromo-6-(2-fluorophenyl)-1-methyl-4H-[1,2,4]triazolo [4,3-a][1,4]benzodiazepine)
U-51754	2-(3,4-dichlorophenyl)-N-[2-(dimethylamino)cyclohexyl]-N-methylacetamide
	2-(ethylamino)-2-phenyl-cyclohexanone deschloro-N-ethyl-ketamine
	4-fluoro-N-ethylamphetamine
bk-2C-B	Beta-keto-4-bromo-2,5-dimethoxyphenethylamine
U-49900	3,4-dichloro-N-[2-(diethylamino)cyclohexyl]-N-methylbenzamide
U-48800	2-(2,4-dichlorophenyl)-N-[2-(dimethylamino) cyclohexyl]-N-methylacetamide
Isopropylphenidate	Isopropyl-2-phenyl-2-(2-piperidinyl)acetate
N,N-Dimethylpentylone, Dipentylone	1-(1,3-benzodioxol-5-yl)-2-(dimethylamino)-1-pentanone
4-fluoro-PV8	4-fluoro-alpha-Pyrrolidinoheptiophenone (other name:)
4-methoxy-PV9	5. 1-(4-methoxyphenyl)-2-(pyrrolidin-1-yl)octan-1-one
Allylescaline	4-allyloxy-3,5-dimethoxyphenethylamine
	4-methyl-alpha-ethylaminopentiophenone
ETH-LAD	6-ethyl-6-nor-lysergic acid diethylamide

Trade or Other Name	Chemical Compound
AL-LAD	6-allyl-6-nor-lysergic acid diethylamide
Ephenidine	N-ethyl-1,2-diphenylethylamine
U-51754	2-(3,4-dichlorophenyl)-N-[2-(dimethylamino) cyclohexyl]-N-methylacetamide
DOC	2,5-dimethoxy-4-chloroamphetamine
Flualprazolam	
3,4-methylenedioxy U-47700 or 3,4-MDO-U-47700	**N-[2-(dimethylamino)cyclohexyl]-N-methyl-1,3-benzodioxole-5-carboxamide**
Isopropyl–U–47700	**3,4–dichloro–N–[2–(dimethylamino)cyclohexyl]–N–isopropylbenzamide**

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Appendix

The Center for Forensic Science Research and Education ("CFSRE"), in collaboration with NMS Labs, the Department of Justice's Crime Drug Enforcement Task Force ("OCDETF"), Temple University and the National Institute of Justice is documenting the first known reports of NPS in the United States through analysis of both seized materials and biological fluids.[14] This collaboration is known as NPS Discovery.

As of June 6, 2019, NPS Discovery has issued reports on 45 NPS first discovered between February 27, 2018 and that date. Of these 45 NPS, 29 do not appear to be scheduled specifically as controlled by any state at this time.

These 29 NPS are:

25E-NBOH	**4-CDMC**
4-MDEC	**MFUBINAC**
N-Acetyl 25I-NBOMe	**U-47931E**
Adamantyl-CHMINACA	**alpha-PiHP**
ortho-Methylmethoxyacetylfentanyl	**Nitrazolam**
Despropionyl 3-Methylfentanyl	**4-Fluoroethamphetamine**
BDB	**4F-MDMB-BINACA**
5Br-AKB48	**4-Acetoxy-MALT**
Benzylfuranylfentanyl	**4F-MDMB-BINACA**
3,4-Dichloroethcathinone (DCEC)	**N,N-Diethyl Hexedrone**
2F-Deschloroketamine	**1P-LSD**
5F-AB-PFUPPYCA	**para-Methoxyfuranylfentanyl**
para-Fluorocyclopropylbenzylfentanyl	**2',5'-Dimethoxyfentanyl**
Despropionyl para-Fluorobenzylfentanyl	**Benzylone (BMDP)**
5Cl-AB-PINACA	

[14] https://www.forensicscienceeducation.org/resources/nps-discovery/.