
July 29, 2026

Drug Enforcement Administration
Attn: DEA Administrator Terrance C. Cole
8701 Morrisette Drive
Springfield, VA 22152

Re: *Docket No. DEA-1665*, 91 Fed. Reg. 39,940 (*July 1, 2026*).

Dear Sir:

Petitioners¹ hereby request a hearing in the matter of: *Schedules of Controlled Substances: Temporary Placement of 5,6-Dichloro Brorphine, 5,6-Dichloro Desmethylchlorphine, N-Propionitrile Chlorphine, and Spirochlorphine in Schedule I of the Controlled Substances Act.*

Introduction

DEA recently published in the Federal Register a notice of intent to publish a temporary scheduling order (in the form of a temporary amendment) to add four synthetic opioids² into schedule I under the Controlled Substances Act (“CSA”). 91 Fed. Reg. 39,940 (July 1, 2026) (the “Notice”).

Petitioners oppose the Notice as it pertains to 5,6-dichloro desmethylchlorphine (“SR-17018”) and respectfully request that the Administrator immediately reconsider the Notice as applied to that specific substance and withdraw the proposed temporary scheduling of SR-17018.

At minimum, Petitioners encourage DEA to sever SR-17018 from the three other substances addressed in the Notice and defer any temporary scheduling order concerning SR-17018 for 180 days. This deferral would allow the Drug Enforcement Administration (“DEA”), the Department of Health and Human Services (“HHS”), the Food and Drug Administration (“FDA”), the National Institute on Drug Abuse (“NIDA”), affected researchers, and other interested persons develop a compound-specific evidentiary record particularized to SR-17018.

¹ Laura M. Bohn, Ph.D. and Thomas D. Bannister, Ph.D.

² 5,6-dichloro brorphine or SR-14968; 5,6-dichloro desmethylchlorphine or SR-17018; N-propionitrile chlorphine or chlorphine; and spirochlorphine or R-6890.

This request does not ask DEA to endorse uncontrolled human use of SR-17018. Petitioners recognize that unsupervised use of an investigational mu-opioid receptor compound can present serious risks. The request instead asks DEA to apply the statutory imminent-hazard standard to SR-17018 itself, distinguish it from materially different compounds, consider its documented research history and potential public-health benefits, and evaluate whether immediate Schedule I control would produce countervailing harms by obstructing research and displacing persons back toward fentanyl, heroin, nitazenes, high-potency 7-hydroxymitragynine products, or other full-agonist opioids.

The Notice does not establish an imminent hazard attributable to SR-17018 individually. DEA reports only two NFLIS-Drug encounters involving SR-17018 in two states since 2025. The Notice identifies no fatality specifically caused by SR-17018, no emergency-department series attributable to SR-17018, no established pattern of violent or hazardous conduct, and no quantitative assessment showing that SR-17018 itself is producing an imminent nationwide threat.

The deaths and overdose evidence emphasized by DEA concern principally N-propionitrile chlorphine (“cychlorphine”), a separate compound. Yet DEA aggregates all four substances and carries the strongest evidence associated with cychlorphine across the entire group. DEA also relies on internet discussions while omitting the central feature of those same discussions: SR-17018 is frequently described as a tool for discontinuing fentanyl, heroin, methadone, buprenorphine, prescription opioids, nitazenes, kratom, and related substances, with minimal reported euphoria. The NIDA-funded National Drug Early Warning System described exactly that pattern in November 2025.

That information does not establish safety or efficacy in humans, but it materially changes the public-health analysis and warrants focused investigation rather than immediate aggregation with compounds associated with dozens of fatalities. Petitioners therefore request the following emergency relief:

1. **Withdraw** the Notice of Intent as to SR-17018 and delete proposed 21 C.F.R. § 1308.11(h)(90).
2. Alternatively, **sever** SR-17018 from Docket No. DEA-1665 and issue no temporary scheduling order concerning SR-17018 until DEA completes an individualized, compound-specific assessment of the evidence.
3. **Stay or defer** any temporary scheduling order concerning SR-17018 for at least 180 days, or for such period as is necessary to obtain a focused scientific and medical evaluation from HHS and to receive submissions from affected researchers and other interested persons.
4. **Open a short, expedited administrative submission period** and accept declarations, scientific literature, toxicology data, patent and grant materials, and public-health evidence concerning SR-17018.

5. **Request from HHS, FDA, and NIDA** a compound-specific scientific and medical assessment that addresses research value, potential therapeutic development, abuse liability, respiratory effects, tolerance, withdrawal, and the public-health consequences of removing an informal opioid-discontinuation substitute from circulation.
6. If DEA believes that some federal control of SR-17018 may ultimately be warranted, **initiate formal rule making proceedings** under 21 U.S.C. § 811(a), including the scientific and medical evaluation required by 21 U.S.C. § 811(b), notice, an opportunity for comment, and a formal evidentiary hearing under 5 U.S.C. §§ 556-557 and 21 C.F.R. §§ 1308.41-1308.45
7. Provide a **written, reasoned disposition** of this request before issuing any temporary scheduling order concerning SR-17018 pursuant to 5 U.S.C. § 555.

Comment/Request for Hearing

(A) Statements of Interest

- **Laura M. Bohn, Ph.D.** is a pharmacologist and opioid-receptor researcher who currently serves as Senior Associate Vice President of Research for USF Health, Vice Dean for Research at the Morsani College of Medicine, and Professor of Molecular Pharmacology and Physiology. Her laboratory has studied how G protein-coupled receptors, including opioid receptors, can be targeted to retain therapeutic benefits while reducing adverse effects. Dr. Bohn is an inventor on U.S. Patent No. 10,751,335 and author associated with the foundational development and characterization of SR-17018 and related signaling-biased mu-opioid receptor compounds.

Temporary placement of SR-17018 in Schedule I directly affects Dr. Bohn's ongoing research by imposing additional registration, protocol, storage, security, recordkeeping, sourcing, transfer, and institutional-review burdens; disrupting collaborations; restricting access to reference material; increasing costs and delay; and impairing ability to reproduce, extend, and translate prior work.

- **Thomas D. Bannister, Ph.D.** is a medicinal chemist and Research Professor and Senior Scientific Director at the Herbert Wertheim UF Scripps Institute for Biomedical Innovation & Technology. Dr. Bannister is a named co-inventor, together with Dr. Laura M. Bohn and Dr. Cullen L. Schmid, on U.S. Patent No. 10,751,335, titled "Signaling-Biased Mu Opioid Receptor Agonists." The patent encompasses SR-17018 and related compounds developed as potential analgesic agents with diminished adverse effects relative to a comparably effective dose of morphine. The patented invention resulted from federally supported research and expressly identifies support under NIH-NIDA Award No. R01DA033073. *See* U.S. Patent No. 10,751,335.

Temporary placement of SR-17018 in Schedule I directly affects Dr. Bannister's ongoing research by imposing additional registration, protocol, storage, security, recordkeeping,

sourcing, transfer, and institutional-review burdens; disrupting collaborations; restricting access to reference material; increasing costs and delay; and impairing ability to reproduce, extend, and translate prior work.

- **Impact to Patent Rights.** Both Dr. Bohn and Dr. Bannister possess direct scientific, professional, property, and economic interests arising from his invention and his continuing interests in the patent covering SR-17018. Temporary placement of SR-17018 in Schedule I would substantially restrict the compound's lawful manufacture, possession, transfer, testing, development, licensing, and commercialization, thereby impeding Dr. Bohn and Dr. Bannister's ability to continue developing the invention, collaborate with other researchers, attract research and commercial partners, pursue licensing opportunities, and realize the economic value associated with the patented technology.

These injuries are concrete and particularized because they directly affect Dr. Bohn and Dr. Bannister's own professional activities and patent-related interests; they are directly traceable to DEA's proposed scheduling action because the resulting Schedule I restrictions would produce those burdens; and they are redressable because withdrawing, severing, or deferring the proposed scheduling of SR-17018 would prevent or alleviate them. *Gettman v. DEA*, 351 U.S. App. D.C. 344, 290 F.3d 430, 433-44 (2002).

Federal law provides that patents possess the attributes of personal property, 35 U.S.C. § 261, and the Supreme Court has recognized that patents remain property for purposes of the Fifth Amendment's Due Process and Takings Clauses. *Fla. Prepaid Postsecondary Educ. Expense Bd. v. Coll. Sav. Bank*, 527 U.S. 627, 642-43 (1999); *Oil States Energy Services, LLC v. Greene's Energy Group, LLC*, 584 U.S. 325, 342 (2018). DEA's proposed action therefore threaten Dr. Bohn and Dr. Bannister with concrete scientific, professional, property-based, and economic injuries and supports his standing to challenge whether temporarily scheduling SR-17018 would affect an uncompensated regulatory taking under the Fifth Amendment.

(B) Procedural Posture and Authority

1. The July 1 Notice Is a Notice of Intent, Not Yet a Temporary Scheduling Order

DEA published the Notice of Intent on July 1, 2026, at 91 Fed. Reg. 39,940, Docket No. DEA-1665. The Notice states that the temporary scheduling order will not be published before July 31, 2026, and that DEA intends to issue the order as soon as possible after the statutory 30-day period. Because no temporary order has yet issued, DEA retains full authority to reconsider the factual and legal basis for the proposed action, withdraw or revise the Notice, sever one substance from the group as to SR-17018, request additional information, **or defer further** action. *Macktal v. Chao*, 286 F.3d 822, 825-26 (5th Cir. 2002) (recognizing an agency's inherent authority to reconsider its decisions, subject to statutory and temporal limitations).

2. Authority to Receive and Decide This Request

This filing invokes DEA's inherent authority to reconsider and withdraw proposed agency action before final disposition; Petitioners' right under 5 U.S.C. § 553(e) to petition for the issuance, amendment, or repeal of a rule; the right to seek agency action and a reasoned disposition under 5 U.S.C. § 555(e); DEA's scheduling authority under 21 U.S.C. § 811; and, as an alternative to temporary scheduling, the petition procedure for initiating regular scheduling proceedings under 21 C.F.R. § 1308.43.

Section 1308.43 permits any interested person to petition for issuance, amendment, or repeal of a rule under section 201 of the Controlled Substances Act and requires a proposed rule and a reasonably concise statement of facts, including relevant medical and scientific evidence. 21 C.F.R. § 1308.43. Petitioners recognize that DEA characterizes temporary scheduling under 21 U.S.C. § 811(h) as an order process distinct from notice-and-comment rulemaking. That characterization does not prohibit DEA from reconsidering the Notice before an order issues. Nor does it prevent Petitioners from separately invoking § 1308.43 to request regular scheduling proceedings under § 811(a), which Congress expressly made subject to formal rulemaking on the record after an opportunity for hearing. 21 USCS § 811.

Section 1308.43 permits any interested person to petition DEA to initiate proceedings for the issuance, amendment, or repeal of a rule under § 811(a). Such a petition must include the proposed rule and a reasonably concise statement of the grounds relied upon, including a summary of any relevant medical or scientific evidence known to the petitioner. 21 C.F.R. § 1308.43(a)–(b). Petitioners recognize that temporary scheduling under § 811(h) is an expedited order process distinct from regular scheduling under § 811(a). Section 1308.43 therefore does not itself require DEA to suspend the pending temporary-scheduling process. It does, however, provide an independent means by which Petitioners may request regular, compound-specific scheduling proceedings if DEA concludes that the available evidence warrants consideration of federal control but does not establish the imminent hazard required for temporary scheduling.

The Administrative Procedure Act mandates that an agency provide prompt notice of the denial of a written petition and, except when the denial is self-explanatory, accompany the notice with a brief statement of the grounds for denial. 5 U.S.C. § 555(e). This requirement ensures the agency's careful consideration of such requests and gives parties the opportunity to apprise the agency of any errors it may have made. An agency's refusal to engage in requested rulemaking is normally subject to judicial review. 21 USCS § 877. DEA's own regulation likewise requires the Administrator, within a reasonable time, to notify a petitioner whether a petition under § 1308.43 has been accepted and, if it is not accepted, to provide the reason. § 1308.43(c). A final DEA decision denying a properly presented regular-scheduling petition may be subject to judicial review under 21 U.S.C. § 877, provided the petitioner satisfies the applicable jurisdictional and exhaustion requirements. *Sisley v. U.S. Drug Enforcement Administration*, 11 F.4th 1029, 1035–36 (9th Cir. 2021).

3. The Statutory Imminent-Hazard Inquiry Is Compound-Specific

Section 811(h)(1) permits temporary placement in Schedule I only when the Administrator finds that scheduling “a substance” is necessary to avoid an imminent hazard to public safety. 21 U.S.C. § 811(h)(1). In making that determination, the Administrator must consider the factors identified in § 811(c)(4)–(6): the substance’s history and current pattern of abuse; the scope, duration, and significance of abuse; and the risk to public health. The inquiry must include consideration of actual abuse, diversion from legitimate channels, and clandestine importation, manufacture, or distribution. *Id.* § 811(h)(3).

The statute thus requires DEA to connect the evidence supporting an imminent-hazard determination to the particular substance proposed for temporary control. Evidence concerning one compound does not, without additional compound-specific analysis, establish an imminent hazard attributable to another compound merely because the substances share receptor activity or certain structural features. In *Touby v. United States*, the Supreme Court upheld § 811(h) against a nondelegation challenge because the statute meaningfully constrains the Attorney General’s discretion by requiring an imminent-hazard finding and consideration of the three factors enumerated in § 811(c)(4)–(6). 500 U.S. 160, 165–67 (1991); see also *United States v. Emerson*, 846 F.2d 541, 545–46 (9th Cir. 1988) (concluding that § 811(h)’s imminent-hazard standard and required statutory factors provide sufficient guidance for the exercise of temporary-scheduling authority). Those statutory constraints require DEA to evaluate whether the evidence concerning SR-17018 itself satisfies the imminent-hazard standard.

4. Formal Rulemaking and Hearing Procedure

For regular scheduling, 21 U.S.C. § 811(a) requires rulemaking on the record after an opportunity for a hearing under 5 U.S.C. §§ 556 and 557. 21 USC § 811. DEA’s regulations provide that, once proceedings are initiated, an interested person may request a hearing to present factual evidence and expert opinion. 21 C.F.R. § 1308.43. Petitioners request that DEA initiate that regular process if it concludes that the available evidence warrants consideration of control but does not support immediate temporary scheduling.

Temporary scheduling orders are not subject to judicial review except as raised by a defendant in a criminal prosecution. *Touby v. United States*, 500 U.S. 160, 168-169 (1991). However, every court to address the issue has concluded that the statutory bar on judicial review does not extend to constitutional challenges. *Touby v. United States*, 500 U.S. 160, 168-169 (1991); *United States v. Emerson*, 846 F.2d 541, 544, 544 (9th Cir. 1988). Therefore, a plaintiff asserting that a temporary scheduling order violates constitutional guarantees may seek district court jurisdiction over such collateral claims, particularly where the agency review scheme would otherwise deny meaningful judicial review, the claims are wholly collateral to the administrative merits, and the claims fall outside the agency’s specialized sphere of expertise. *Sisley v. United States DEA*, 11 F.4th 1029, 1035-36 (9th Cir. 2021).

Petitioners submit this request before any temporary order issues to afford DEA an opportunity to address the statutory, constitutional, scientific, and public-health defects identified herein and to preserve Petitioners' ability to pursue any judicial remedies that remain available following final agency action.

(C) Objections/Issues

1. The Notice Aggregates Four Distinct Substances
2. DEA's Own Encounter Data for SR-17018 Are Extremely Limited
3. The Fatality and Overdose Evidence Cited in the Notice Does Not Concern SR-17018
4. SR-17018 Has a Substantial Preclinical Research History
5. The Government Has Supported the Underlying Research
6. NDEWS Identified a Distinct Withdrawal-Management Pattern
7. Immediate Schedule I Placement Will Materially Burden Research
8. Analysis of 3 Factors Determinative of Control and Findings
9. Grounds for Reconsideration, Withdrawal, Severance, and Delay

(D) Statement of Positions on Objections/Issues

1. The Notice Aggregates Four Distinct Substances

The Notice addresses SR-14968, SR-17018, cyclochlorphine, and spirochlorphine together. Although DEA labels them collectively as synthetic opioids or "orphines," the compounds are not interchangeable. They differ in chemical structure, receptor pharmacology, potency, efficacy, metabolism, use patterns, evidentiary histories, and reported harms.

The central defect in the Notice is not that DEA considered common features; it is that DEA relied on aggregated evidence without making a sufficiently particularized imminent-hazard finding for SR-17018. DEA proposes separate drug codes for each compound, demonstrating that the agency can and does treat them as distinct controlled substances. The same compound-specific discipline must govern the predicate findings.

Because no temporary scheduling order has yet been issued, DEA remains free to reconsider the factual and legal basis for the proposed action, withdraw or revise the Notice as to SR-17018, request additional information, or defer further action. *Macktal v. Chao*, 286 F.3d 822, 825–26 (5th Cir. 2002) (recognizing an agency's inherent authority to reconsider its decisions, subject to statutory and temporal limitations).

2. DEA's Own Encounter Data for SR-17018 Are Extremely Limited

DEA reports a collective total of 265 NFLIS-Drug reports across twenty-one states for the four substances included in the Notice. The compound-specific breakdown, however, is stark: only two encounters involving SR-17018 in two states since 2025, compared with 225 encounters involving cychlorphine in nineteen states, thirty-six involving spirochlorphine in six states, and two involving 5,6-dichloro bromphine in two states. SR-17018 therefore accounts for only two of the 265 aggregate NFLIS-Drug reports cited by DEA. 91 Fed. Reg. at 39,942.

DEA also reports that the RaDAR program detected SR-17018 in multiple West Coast samples collected in February 2026. According to the Notice, those samples contained either cannabinoids and methamphetamine or no other detected compounds. *Id.* The Notice does not disclose how many SR-17018 samples RaDAR analyzed, their concentrations, the circumstances in which they were collected, the products they were believed to contain, whether any person consumed them, or whether any adverse event was associated with them.

3. The Fatality and Overdose Evidence Cited in the Notice Does Not Concern SR-17018

The Notice reports that DEA TOX positively identified cychlorphine in forty-nine fatalities. It does not identify a single fatality involving SR-17018. The only published nonfatal-overdose case discussed in the Notice likewise concerned cychlorphine: a person inhaled material believed to be alprazolam that forensic analysis revealed was primarily cychlorphine mixed with fentanyl and xylazine. 91 Fed. Reg. at 39,943. Thus, neither the forty-nine reported fatalities nor the single published nonfatal-overdose case involved SR-17018. DEA cannot treat cychlorphine-specific fatality and overdose evidence as establishing that SR-17018 itself presents an imminent hazard without supplying a reasoned, compound-specific basis connecting that evidence to SR-17018.

4. SR-17018 Has a Substantial Preclinical Research History

SR-17018 was developed and studied as part of an effort to identify mu-opioid receptor agonists that might preserve analgesia while reducing respiratory depression, tolerance, dependence, or withdrawal. Peer-reviewed preclinical literature includes:

- Schmid et al., *Bias Factor and Therapeutic Window Correlate to Predict Safer Opioid Analgesics*, 171 Cell 1165-1175.e13 (2017), reporting a relationship between signaling bias and therapeutic window in preclinical models and characterizing SR-17018 among the tested compounds.
- Grim et al., *A G Protein Signaling-Biased Agonist at the Mu-Opioid Receptor Reverses Morphine Tolerance While Preventing Morphine Withdrawal*, 45 Neuropsychopharmacology 416-425 (2020), reporting that substitution with SR-17018 restored morphine potency and prevented withdrawal in morphine-tolerant mice.

- Pantouli et al., *Comparison of Morphine, Oxycodone and the Biased MOR Agonist SR-17018 for Tolerance and Efficacy in Mouse Models of Pain*, 185 *Neuropharmacology* 108439 (2021), finding model-dependent effects and underscoring that SR-17018 requires further study rather than categorical assumptions.
- Kudla et al., *Comparison of an Addictive Potential of Mu-Opioid Receptor Agonists with G Protein Bias: Behavioral and Molecular Modeling Studies*, 14 *Pharmaceutics* 55 (2022), identifying both rewarding/addictive-liability signals and potentially favorable modulation of some morphine-dependence symptoms.

The literature does not establish that SR-17018 is safe or effective in humans. It does establish that SR-17018 is a patented compound with a substantial preclinical research history, a differentiated pharmacological profile, and unresolved scientific questions concerning analgesia, respiratory effects, tolerance, dependence, withdrawal, and abuse liability. Those unresolved questions support structured, compound-specific scientific investigation; they do not justify treating SR-17018 as interchangeable with cyclophosphamide or relying on cyclophosphamide's substantially different evidentiary record and pharmaceutical properties to establish that SR-17018 presents an imminent hazard to public safety. Cyclophosphamide produces drastically different effects than SR-17018 and it is arbitrary and capricious to infer that SR-17018 has the same pharmacology and effects and produces the same risk as cyclophosphamide.

5. The Government Has Supported the Underlying Research

U.S. Patent No. 10,751,335 states that the invention was made with federal support under NIH-NIDA Award No. R01DA033073 and that the United States possesses certain rights in the invention. *See* U.S. Patent No. 10,751,335. The federal government has therefore supported the development of the scientific knowledge and intellectual property underlying SR-17018. Before taking action that could substantially impede further investigation and development of the compound, DEA should consult with the relevant federal health and research agencies and consider SR-17018's federally supported research history on an individualized record.

6. NDEWS Identified a Distinct Withdrawal-Management Pattern

In November 2025, the NIDA-funded National Drug Early Warning System reported that online discussants described using SR-17018 in attempts to discontinue fentanyl, heroin, methadone, buprenorphine, prescription opioids, synthetic opioids described as “zenes,” and kratom. Discussants described SR-17018 as producing minimal euphoria or analgesia while reducing opioid tolerance and helping manage physical withdrawal symptoms. *See* National Drug Early Warning System, *Reddit Mentions of SR-17018* (Nov. 14, 2025).

This evidence supports risk mitigation, further scientific and clinical investigation, and accurate public-health messaging. It does not, however, support a one-directional characterization of SR-17018 as a substance principally sought or used to reset opioid tolerance for the purpose of maximizing subsequent euphoria. The alert instead documents significant discussion of SR-17018 as an attempted means of discontinuing opioids, managing physical withdrawal, and reducing cravings. Those reported uses materially affect the public-health analysis and warrant compound-specific investigation.

7. Immediate Schedule I Placement Will Materially Burden Research

Schedule I research remains legally possible, but it is substantially more burdensome. Researchers and institutions may need new or modified DEA registrations, state authorizations, protocol-specific approvals, compliant security, inventories, transfer procedures, quotas or sourcing arrangements, and revised contracts. Delays can cause loss of personnel, grants, samples, collaborations, and intellectual-property opportunities. For an emerging compound with a small research community, those burdens can functionally halt or redirect work even when research is technically lawful.

Research involving a Schedule I substance remains legally permissible, but it is subject to substantial regulatory requirements. Researchers may be required to obtain or modify DEA registrations, secure approval of substance- and project-specific research protocols, obtain applicable state authorization, implement compliant security and storage measures, conduct and maintain inventories and records, and revise sourcing and transfer arrangements. *See* 21 C.F.R. §§ 1301.13, 1301.18, 1301.51, 1301.75, 1304.04, 1304.11. Manufacturing or procurement activities may also require additional authorization or quota arrangements where applicable.

Those requirements can produce compliance delays and increased costs that disrupt personnel, grants, samples, collaborations, research timelines, contractual arrangements, and intellectual-property-development opportunities. For an emerging compound studied by a comparatively small research community, those burdens can functionally halt, delay, or redirect ongoing work even though the research remains technically lawful. Temporary scheduling will impact particular projects, collaborations, research materials, and professional and economic interests.

SR-17018 remains an active subject of biomedical research. Ongoing investigations continue to evaluate its receptor pharmacology, signaling mechanisms, analgesic efficacy, tolerance, dependence, respiratory safety, and potential therapeutic applications. These efforts involve academic investigators, federally supported research programs, and collaborations intended to determine whether functionally selective opioid ligands can provide clinically meaningful improvements over existing opioid medications. Premature placement into Schedule I will almost certainly substantially increase research harms through administrative burdens, delayed research timelines, increased research costs, and reduced availability of study material without materially addressing the illicit opioid crisis. The public health implications of interrupting this research warrant careful consideration. The United States continues to experience unprecedented mortality from illicit fentanyl and other highly

efficacious MOR agonists. Compounds such as SR-17018 are being investigated precisely because they may help identify safer options. Restricting access before these investigations are completed risks slowing development of potentially improved analgesics while offering little measurable benefit to public safety, particularly in the absence of evidence demonstrating significant diversion or widespread recreational use.

DEA's characterization of the available literature should therefore distinguish between compounds developed for illicit recreational markets and compounds that remain primarily research tools. Although SR-17018 exhibits opioid pharmacology and should continue to be studied carefully, the current evidence does not establish that it presents the type of immediate and substantial public-health threat contemplated by the emergency scheduling provisions of the Controlled Substances Act.

Should DEA nevertheless determine that additional regulatory oversight is warranted, several alternatives exist that would better balance public safety with scientific progress. These include delayed implementation of scheduling to allow completion of ongoing studies, explicit research exemptions, streamlined registration procedures for qualified investigators, or narrowly tailored controls directed toward commercial distribution rather than broad Schedule I placement. Such approaches would preserve critical scientific research while maintaining appropriate safeguards against diversion.

For these reasons, the available scientific evidence does not support the finding that immediate Schedule I placement of SR-17018 is necessary to avoid an imminent hazard to public safety. The current record instead supports continued scientific investigation under appropriately controlled conditions while additional evidence is developed regarding its pharmacology, abuse liability, and potential therapeutic value.

8. Analysis of 3 Factors Determinative of Control and Findings

Per the Drug Enforcement Administration's filing, "To find that temporarily placing a substance in schedule I of the CSA is necessary to avoid an imminent hazard to public safety, the Administrator must consider three of the eight factors set forth in 21 U.S.C. 811(c): the substance's history and current pattern of abuse; the scope, duration, and significance of abuse; and what, if any, risk there is to public health. This consideration includes any information indicating actual abuse, diversion from legitimate channels, and clandestine importation, manufacture, or distribution of these substances."

Substances that meet criteria for those three factors may only be placed in schedule I. Substances in schedule I are defined by the CSA to have high potential for abuse, no currently accepted medical use in treatment in the United States, and a lack of accepted safety for use under medical supervision. However, when finding schedule I placement on a temporary basis, 21 U.S.C 811(h) does not require the DEA to consider whether the substance has a currently accepted medical use in treatment in the United States.

The available scientific evidence does not support the temporary placement of 5,6-dichloro-1-(1-(4-chlorobenzyl)piperidin-4-yl)-1,3-dihydro-2 *H* -benzo[*d*]imidazol-2-one (hereinafter, "SR-17018") into Schedule I of the Controlled Substances Act. Unlike recently identified illicit synthetic opioids such as N-propionitrile chlorphine, spirochlorphine, and 5,6-dichlorobrorphine, SR-17018 has been developed as a research compound with the specific objective of improving opioid pharmacology through enhanced therapeutic selectivity and reduced abuse potential.

DEA's temporary scheduling authority under 21 U.S.C. § 811(h) is intended to address substances that pose an "imminent hazard to the public safety." The current record does not demonstrate that SR-17018 meets this statutory standard. Instead, the available literature describes a compound with pharmacological characteristics that differ substantially from conventional full mu-opioid receptor (MOR) agonists, including fentanyl, morphine, brorphine, cychlorphine, spirochlorphine, and related benzimidazole opioids.

Unlike these compounds, SR-17018 has consistently been demonstrated as a partial and functionally selective MOR agonist designed to separate analgesia from adverse opioid effects. Multiple preclinical studies indicate that SR-17018 produces robust analgesia while exhibiting reduced respiratory depression, limited β -arrestin recruitment, altered tolerance development, and an atypical dependence profile compared with classical opioids. These mechanistic differences distinguish SR-17018 from the synthetic opioids currently driving overdose mortality.

The available evidence concerning abuse liability is also substantially more limited than the evidence supporting temporary scheduling of emerging illicit opioids. Existing studies consist primarily of rodent experiments, with comparatively few nonhuman-primate investigations. There is no evidence of widespread distribution, medical encounters in emergency rooms, or involvement in fatal intoxications comparable to fentanyl analogues or recently emerging benzimidazole opioids. There is no evidence of widespread distribution, hospitalizations or fatal intoxications comparable to fentanyl analogues or recently emerging benzimidazole opioids. While animal models demonstrate that SR-17018 is a MOR agonist and therefore shares certain characteristics with other MOR agonists, the complete pharmacological characterization of SR-17018 demonstrates the compound as a distinct profile. This profile and the lack of undocumented deaths or overdoses provide evidence there is no demonstrated imminent hazard to public health requiring emergency scheduling.

a. SR-17018 Is Pharmacologically Distinct From Recently Scheduled Synthetic Opioids

A central premise underlying temporary scheduling under 21 U.S.C. § 811(h) is that the substance at issue presents pharmacological and public-health risks comparable to those of controlled substances already known to pose an imminent hazard. The currently available evidence does not support such a conclusion for SR-17018.

While SR-17018, 5,6-dichloro buporphine, *N*-propionitrile chlorphine, and spirochlorphine belong to the same subset of chemical class colloquially known as “orphines,” they have distinct pharmacodynamic profiles. SR-17018 was intentionally designed as an experimental ligand to investigate whether selective activation of MOR signaling pathways could preserve analgesia while reducing adverse effects traditionally associated with opioid therapy, rather than another analogue of highly potent full agonists at the MOR (Schmid et al. 2017).

Most synthetic opioids currently responsible for overdose fatalities, including fentanyl, buporphine, and emerging benzimidazole derivatives, function as highly efficacious MOR agonists. Their high intrinsic efficacy produces profound receptor activation associated with euphoria, respiratory depression, physical dependence, and fatal overdose, particularly when used outside medical supervision or combined with other central nervous system depressants.

By contrast, published pharmacological studies describe SR-17018 as exhibiting substantially different signaling properties. Rather than uniformly activating all downstream MOR pathways, SR-17018 is not only a partial agonist, but demonstrates functional selectivity and specific receptor binding to promote receptor signaling patterns that differ from classical opioids (Stahl et al. 2021; Fritzwanker et al. 2021; Singleton et al. 2024). SR-17018 is biased for the G-protein signaling over β -arrestin recruitment, is non-competitive stabilizing this signaling pathway, and favors cellular mechanisms that promote a release state of the MOR, which enhances and prolongs the effects of analgesics without causing respiratory depression at therapeutic doses (Stahl et al. 2021; Stahl et al. 2026). This pharmacological profile has been the principal focus of its development and distinguishes it mechanistically from compounds designed solely to maximize receptor activation.

Full MOR agonists generally produce increased respiratory depression as receptor occupancy increases. Partial agonists, or compounds with limited signaling efficacy, exhibit ceiling effects for several physiological responses. Buprenorphine, a MOR partial agonist classified in Schedule III, exhibits this ceiling effect meaning its pharmacological impacts plateau at moderate-to-high rather than escalating dangerously (Virk et al. 2009). This safety mechanism limits respiratory depression and euphoria, reducing overdose risks.

Importantly, these mechanistic differences formed the scientific rationale for developing SR-17018. Its purpose has been to test whether biased or functionally selective μ -opioid receptor activation can improve the therapeutic index of opioid analgesics (Podlewska et al. 2020). Scheduling SR-17018 as though it were pharmacologically interchangeable with any MOR agonist or recently emerged illicit benzimidazole opioids overlook this fundamental distinction.

i. Respiratory Depression

Respiratory depression remains the principal mechanism responsible for opioid overdose mortality, as it is a side effect of all opioid substances including prescribed analgesics (Medina et al. 2026) such as low-potency agents like tramadol (Schedule IV) or codeine (Schedule II-V, depending

on preparation). Given SR-17018 selective pharmacological design, current preclinical evidence shows it produces less respiratory depression than classical full agonists at analgesic doses. Using whole-body plethysmography, which assesses oxygen saturation and respiratory rate, SR-17018 produced minimal respiratory depression across effective analgesic doses generating a therapeutic index 5-20 times wider than morphine or fentanyl (Schmid et al. 2017), but larger systemic concentrations above the therapeutic index had measurable respiratory depression (Hill et al. 2023; Zamarripa et al. 2024).

DEA should therefore avoid equating the presence of μ -opioid receptor activity with equivalent overdose liability. Receptor activation alone does not establish identical pharmacological risk. Intrinsic efficacy, signaling bias, receptor reserve, pharmacokinetics, and tissue-specific signaling all influence the magnitude of respiratory depression produced by a given opioid.

ii. *Reward and Abuse Liability*

The current literature does not establish abuse liability comparable to fentanyl, buprenorphine, or recently emerged illicit synthetic opioids. In measures across species using self-administration SR-17018 was found to produce lower rates of drug intake and lower maximal efficacy, paralleling a profile like buprenorphine rather than high-efficacy full MOR agonists (Zamarripa et al. 2024; Ko et al. 2023).

Given the limited data for human use of SR-17018, there is not available evidence to demonstrate that SR-17018 produces the rapid reinforcement, profound euphoria, or exceptionally high abuse potential characteristic of fentanyl analogues and highly potent benzimidazole opioids.

iii. *Tolerance, Dependence, and Withdrawal*

Published studies suggest that SR-17018 exhibits an atypical profile with respect to tolerance development. Several investigators have reported sustained analgesic efficacy in experimental pain models despite repeated administration, whereas conventional opioids such as morphine frequently demonstrate progressive loss of analgesic effectiveness requiring dose escalation (Grim et al. 2020).

Available evidence indicates that dependence and withdrawal associated with SR-17018 is difficult to quantify given the lack of effects in abuse liability studies. Spontaneous cessation of chronic SR-17018 treatment produced significantly fewer and less severe physical withdrawal signs compared to abrupt termination of morphine treatment. Further, antagonist-precipitated withdrawal triggered physical signs in SR-17018 animals, although lower in severity than in morphine-dependent animals (Kudla et al. 2021). Other studies demonstrate SR-17018 can prevent onset of morphine withdrawal while preserving its analgesic effects (Grim et al. 2020).

These observations remain subjects of active investigation but are inconsistent with the proposition that SR-17018 simply duplicates the pharmacological profile of fentanyl or other high-efficacy opioids.

iv. Analgesia and other Behavioral Effects

The analgesic and antinociceptive properties of SR-17018 have been extensively evaluated in preclinical rodent pain paradigms, as the compound was created as a possible alternative for high efficacy full MOR agonists.

In several measures of antinociception, including models of neuropathic and inflammatory pain models, SR-17018 was able to produce sustained antinociception with potency and efficacy similar to morphine and oxycodone (Schmid et al. 2017; Pantouli et al. 2021; Cornelissen et al. 2021). However, unlike these full MOR agonists, SR-17018 was able to sustain this efficacy following both acute and repeated administration without induction of tolerance and reduced efficacy. In animal studies where subjects have established morphine tolerance, SR-17018 was found to restore morphine efficacy in pain models while preventing withdrawal symptoms (Grim et al. 2020).

High-efficacy MOR agonists often have a signature of induced hyperlocomotion and ambulatory activation in rodents. In baseline ambulatory tests, SR-17018 produced significantly lower locomotor activation compared to high-efficacy MOR agonists like SR-14968 or morphine (Schmid et al. 2017; Kudla et al. 2021). Further, SR-17018 combined with morphine was able to attenuate hyperactivity while antinociception was increased (Acevedo-Canabal et al. 2023)

b. Factor 4 – History and Current Pattern of Abuse

The available evidence does not demonstrate that SR-17018 has a history or current pattern of abuse comparable to substances that have previously warranted emergency scheduling under 21 U.S.C. § 811(h).

SR-17018 originated from a medicinal chemistry program designed to improve upon the therapeutic profile of opioid analgesics using design based in the pharmacological concept of functional selectivity. Published studies have consistently described the compound as an experimental pharmacological tool used to investigate whether analgesia or antinociception can be separated from undesirable opioid effects such as respiratory depression, rapid tolerance and opioid withdrawal syndrome.

The compound was invented by Dr's. Thomas D. Bannister, Laura M. Bohn, and Cullen L. Schmid and a patent application covering SR-17018 and related analogues was filed by The Scripps Research Institute in 2017. The patent was granted August 25, 2020, under publication number US-10751335-B2 (PubChem). Research on the compound resulted in its first publication in the same year of patent filing (Schmid et al. 2017). Since its initial publication, SR-17018 has remained the subject of academic investigation into opioid receptor signaling leading to 27 published articles (including reviews, abstracts and original research), 7 preprint articles (yet to be peer reviewed). An ongoing federal grant funded by the National Institute on Drug Abuse (Project ID: 7R01DA038964-10), led to the compounds discovery and continues to fund its current investigation.

The available evidence does not demonstrate illicit distribution or widespread recreational use comparable to the other substances in this temporary scheduling. Rather, it demonstrates that this is an academic tool and research compound that is under ongoing investigation.

c. Factor 5 – The Scope, Duration, and Significance of Abuse

The current administrative record does not establish that SR-17018 use or abuse has become sufficiently widespread or significant to justify emergency scheduling under 21 U.S.C. § 811(h). Temporary scheduling under this rule is intended to address emerging substances that have demonstrably progressed beyond isolated occurrence and into widespread distribution or abuse.

Using publicly available databases, SR-17018 was only identified in a single sample designated for recreational use over the last 10 years since its original synthesis (Center for Forensic Science Research & Education). The report states the material was a white powder of an unknown source originating in the United States. The report does not list an amount detected, but states that it has not been detected in any other material or toxicology cases at the Center. DEA reports 2 total encounters of SR-17018 in 2 states since 2025 from the National Forensic Laboratory Information System (NFLIS) Drug program but does not provide publicly available reports regarding these encounters.

The Rapid Drug Analysis and Research (RaDAR) February 2026 Newsletter reported detected of SR-17018 “in multiple West Coast samples that either contained no other compounds or contained cannabinoids and methamphetamine.” This is the only note in the newsletter, with no information on detected amounts, samples, or chemical composition of the samples (Rapid Drug Analysis and Research, 2026). Given the lack of information and external verification of the samples, the scope, duration and significance of abuse cannot be quantified empirically.

Significance of abuse is evaluated through geographically distributed forensic identifications, widespread diversion, documented patterns of illicit distribution, and consistent detection through established surveillance programs. At present, the available evidence does not establish that SR-17018 meets these indicators.

d. Factor 6 – What, if Any, Risk There Is to Public Health

Based on the presently available evidence, the record does not establish that SR-17018 presents an imminent hazard to public health warranting temporary placement into Schedule I.

The argument outlined in Docket No. DEA-1665 is largely based around the statement that SR-17018 “exhibit[s] pharmacological profiles similar to those of fentanyl, morphine, and other mu-opioid receptor agonists.” This statement is not scientifically correct, as has been established in this analysis.

The published literature demonstrates that SR-17018 is a partial MOR agonist, not a full agonist, as well as has a lower efficacy compared to higher efficacy agonists cited. SR-17018 was developed specifically to investigate whether functionally selective receptor signaling could improve the therapeutic index of opioid analgesics by maintaining analgesia while reducing adverse effects

traditionally associated with opioid therapy, purposely altering its chemical structure to produce a safer pharmacological profile distinct from high efficacy full MOR agonists.

The record does not demonstrate a substantial body of confirmed overdose investigations attributable to SR-17018, nor does it establish repeated identification through national forensic surveillance comparable to substances that have previously been subject to temporary scheduling. Likewise, there is no demonstrated pattern of counterfeit products, organized distribution networks, or recurring reports indicating that SR-17018 has become established within illicit markets.

The DEA states “evidence suggests that users abuse the four synthetic opioids for their euphoric and analgesic effects” and that “users also specifically report self-administering 5,6-dichloro desmethylchlorphine [SR-17018] to reduce or reset opioid tolerance in an attempt to continue or maximize drug-induced euphoric effects in subsequent sessions.” However, they provide no citation for these statements and no empirical evidence of use (Drug Enforcement Administration, 2026). There are limited case reports in the literature for these substances and limited toxicological screening methods for identifying synthetic opioids that only have a single documented use case in 10 years. As such, there are no toxicological or forensic case reports, even through DEA Toxicology Testing Program (DEA TOX) expanded analysis, on SR-17018.

There is no evidence that SR-17018 poses a risk to public health or safety. However, temporary placement of SR-17018 into Schedule I would substantially increase the administrative and logistical burdens associated with conducting legitimate scientific research, thus posing a risk to public health through creating “research harms.”

Scheduling SR-17018 would cause harm to the researchers, patent holders and other collaborators working with the substance. Investigators would be required to halt their research to obtain or modify DEA Schedule I registrations, implement additional security and recordkeeping requirements, secure amended institutional approvals, and satisfy additional storage, inventory, and inspection obligations. These requirements delay the initiation of new studies, disrupt ongoing studies, increase research costs, and discourage participation by laboratories lacking existing Schedule I infrastructure (Jaster et al. 2026).

The resulting delays would extend beyond individual investigators. Collaborative research programs, contract laboratories, and institutions receiving federal funding would also face increased administrative burdens, potentially slowing progress toward resolving the scientific questions that remain central to evaluating SR-17018's pharmacological profile and furthering the mission to stop the opioid epidemic. SR-17018 is an important experimental tool for investigating whether novel MOR signaling mechanisms can produce safer opioid analgesic therapies. Over the last 10 years, multiple academic institutions have used the compound safely without issues of diversion. These investigations have contributed substantially to current understanding of opioid receptor biology and continue to inform the broader search for analgesics with improved safety profiles. Interrupting or substantially delaying this work would impede ongoing efforts to better understand opioid pharmacology more generally. Because the scientific evaluation of SR-17018 remains incomplete,

preserving reasonable access for qualified investigators advances, rather than undermines, the public interest.

e. Finding of Necessity of Schedule I Placement to Avoid Imminent Hazard to Public Safety

SR-17018 is a MOR receptor agonist and therefore warrants continued scientific scrutiny and appropriate regulatory oversight consistent with its pharmacological class but its pharmacology alone does not satisfy the requirements of the three factors set forth in 21 U.S.C. 811(c) for temporary scheduling: the substance's history and current pattern of abuse; the scope, duration, and significance of abuse; and what, if any, risk there is to public health.

SR-17018 has not been empirically associated with widespread abuse, recurring overdose incidents, significant diversion from the laboratory, or a demonstrable burden on public-health sufficient to support the finding of imminent hazard.

By contrast, immediate placement into Schedule I would foreseeably impose substantial regulatory constraints on ongoing biomedical research, increase the administrative and financial burdens associated with federally supported investigations, restrict access to the compound by qualified researchers, and impede the timely resolution of unresolved scientific questions concerning opioid receptor pharmacology, functional selectivity, and analgesic development.

Accordingly, the evidence presently available does not support a reasoned determination that temporary Schedule I control would yield a net public-health benefit. Rather, the current record indicates that continued investigation under existing regulatory frameworks more appropriately advances the public interest, while preserving the ability to further characterize SR-17018's pharmacological properties, safety profile, and potential therapeutic relevance.

9. Grounds for Reconsideration, Withdrawal, Severance, and Delay

a. The Record Does Not Establish an Imminent Hazard Caused by SR-17018

The extraordinary procedure authorized by § 811(h) permits DEA to bypass, for up to three years, critical safeguards governing regular scheduling, including the scientific and medical evaluation and scheduling recommendation ordinarily obtained from HHS under § 811(b), formal rulemaking on the record after an opportunity for a hearing, and pre-enforcement judicial review of the temporary scheduling order. DEA must notify HHS of its intended action and consider any comments HHS submits, but HHS's prior approval is not required. 21 U.S.C. § 811(h)(1), (4), (6); *Touby v. United States*, 500 U.S. 160, 163, 168–69 (1991). Because temporary scheduling dispenses with these protections and immediately subjects a substance to Schedule I controls and criminal sanctions, the statutory requirement that such action be “necessary to avoid an imminent hazard to the public safety” must perform meaningful limiting work.

DEA's compound-specific evidence concerning SR-17018 does not satisfy that demanding standard. As discussed above, the Notice identifies only two NFLIS-Drug encounters involving SR-17018, an unspecified number of RaDAR detections, and monitored internet discussions. It identifies no confirmed fatality involving SR-17018, no published nonfatal-overdose case involving the compound, no quantified increase in emergency-department presentations, and no established national pattern of trafficking or abuse attributable to SR-17018. That record may justify continued surveillance, risk warnings, targeted enforcement against adulteration or misbranding, additional scientific investigation, or an expedited regular-scheduling inquiry. It does not establish that immediate nationwide Schedule I control for up to three years is necessary to prevent an imminent hazard.

Section 811(h) requires DEA to consider the substance's history and current pattern of abuse; the scope, duration, and significance of that abuse; and the risk, if any, to public health. 21 U.S.C. §§ 811(c)(4)–(6), 811(h)(3). Within those factors, DEA must particularly consider actual abuse, diversion from legitimate channels, and clandestine importation, manufacture, or distribution. *Id.* § 811(h)(3). The Supreme Court upheld this extraordinary delegation of temporary-scheduling authority because these requirements meaningfully constrain DEA's discretion to define conduct carrying criminal penalties. *Touby*, 500 U.S. at 165–67; *see also United States v. Emerson*, 846 F.2d 541, 545–46 (9th Cir. 1988). Applying those statutory constraints to SR-17018's limited record does not support DEA's conclusion that temporarily scheduling the compound is necessary to avoid an imminent hazard. The statutory boundaries identified in *Touby* are subject to independent judicial interpretation. Under *Loper Bright Enterprises v. Raimondo*, a reviewing court must exercise its independent judgment in determining whether an agency acted within its statutory authority and must ensure that the agency engaged in reasoned decision-making within the boundaries Congress established. 603 U.S. 369, 394–95, 412–13 (2024).

Accordingly, DEA's interpretation and application of the terms “necessary” and “imminent hazard to the public safety” would not receive deference merely because § 811(h) entrusts DEA with administering the temporary-scheduling process. DEA must make the findings Congress required and connect those findings to evidence concerning SR-17018 itself. If there are no boundaries to the Administrator's temporary-scheduling authority, then the meaningful constraints required under *Touby* are absent in this action. The constraints imposed by Congress must be seriously considered and do not afford limitless discretion to the Administrator. If the DEA is allowed to engage in emergency scheduling without a clear nexus to an **imminent** health threat supported by sufficient and quantifiable evidence, then those restraints imposed by Congress become performative and are counter to the holding in *Touby* and is not the best interpretation or application of 21 U.S.C. §§ 811(c)(4)–(6), 811(h)(3).

b. DEA Improperly Transfers Evidence from Cychlorphine and Other Compounds to SR-17018

The Notice repeatedly shifts between collective statements and compound-specific data. The largest seizure count, overdose clusters, published nonfatal overdose, and forty-nine fatalities concern

cychlorphine. Yet the Notice's ultimate finding declares that the uncontrolled manufacture, distribution, research, possession, and abuse of all four compounds pose imminent hazards.

The Notice repeatedly shifts between aggregate statements about four “synthetic opioids” and compound-specific evidence that differs dramatically among them. Of the 265 collective NFLIS-Drug reports cited by DEA, 225 concern N-propionitrile chlorphine, commonly known as cychlorphine, while only two concern SR-17018. The 2025 overdose clusters, the only published nonfatal-overdose case, and all forty-nine fatalities identified through DEA TOX likewise concern cychlorphine—not SR-17018. By contrast, the Notice identifies no confirmed fatality or published nonfatal-overdose case attributable to SR-17018 and does not specify the number of SR-17018 samples detected through the RaDAR program. *Schedules of Controlled Substances: Temporary Placement of 5,6-Dichloro Brorphine, 5,6-Dichloro Desmethylchlorphine, N-Propionitrile Chlorphine, and Spirochlorphine in Schedule I of the Controlled Substances Act*, 91 Fed. Reg. 39,940, 39,942–43 (July 1, 2026) (notice of intent).

DEA nevertheless relies on this collective record to find that the uncontrolled manufacture, distribution, possession, research, and abuse of each of the four compounds poses an imminent hazard to public safety. *Id.* at 39,943. That reasoning does not answer the compound-specific statutory question presented here: whether temporarily placing SR-17018 in Schedule I is itself “necessary to avoid an imminent hazard to the public safety.” 21 U.S.C. § 811(h)(1). DEA proposes a separate regulatory listing and drug code for SR-17018, confirming that it is independently identifiable and capable of separate treatment. The agency therefore cannot use cychlorphine’s substantially different encounter, overdose, and fatality record to supply findings missing from the evidence concerning SR-17018. Before imposing the immediate and severe consequences of temporary Schedule I control, DEA must determine whether the evidence concerning SR-17018 itself satisfies each statutory predicate.

This reasoning obscures rather than answers the statutory question: what evidence shows that SR-17018 itself creates an imminent hazard requiring immediate Schedule I placement. The defect is especially consequential because DEA proposes separate drug codes for each compound, demonstrating that the agency can and does treat them as distinct controlled substances. The same compound-specific discipline must govern the predicate findings.

c. Similar Mu-Opioid Activity Does Not Establish Similar Real-World Risk

DEA also reasons that because the four compounds bind to and activate the mu-opioid receptor, they are likely to produce physiological responses similar to fentanyl, morphine, and other mu-opioid agonists. 91 Fed. Reg. at 39,941–43. But receptor classification alone does not establish that different compounds possess equivalent potency, respiratory effects, abuse liability, dependence potential, duration of action, therapeutic index, or real-world overdose risk. Mu-opioid ligands can differ materially in intrinsic efficacy, signaling profile, pharmacokinetics, and resulting physiological effects. Accordingly, evidence that SR-17018 acts at the same general receptor as fentanyl or morphine

may justify further investigation, but it does not by itself establish an imminent hazard requiring immediate Schedule I placement.

The Notice's own analysis demonstrates the limits of treating the four compounds as pharmacologically interchangeable. DEA cites dose-dependent antinociception, reward-associated behavior, and physical dependence data for SR-17018 and 5,6-dichloro broporphine, while separately citing receptor-binding-affinity data for cychlorphine and spirochlorphine. *Id.* at 39,943. Those are different findings concerning different compounds, and none eliminates the need to evaluate SR-17018's complete pharmacological and toxicological profile together with its own human-exposure and real-world evidence. DEA may not convert shared receptor activity into a presumption that SR-17018 presents the same public-health risk as fentanyl, morphine, cychlorphine, or any other mu-opioid agonist. The imminent-hazard determination must instead rest on a reasoned connection between SR-17018's own characteristics, its documented pattern and scope of abuse, and the public-health risk attributable to that compound.

d. DEA's Treatment of Internet Evidence Is Selective and Internally Inconsistent

DEA relies on online reports to infer misuse, routes of administration, and an intent to reduce tolerance before later recreational use. But the same source base, as summarized by NDEWS, indicates that users often seek to discontinue high-risk opioids and report minimal euphoria. DEA may discount anecdotal reports as unverified, but it cannot rationally credit only the portions supporting control while ignoring portions directly relevant to public-health **benefit**, use motivation, and alternatives.

A sound agency response would distinguish at least three use patterns: (1) use intended to discontinue or taper other opioids; (2) use for analgesia; and (3) use for euphoria or to alter tolerance before resuming other opioids. The Notice does not quantify these categories or explain which predominates. Without that analysis, DEA cannot assess the net public-health consequences of immediate prohibition.

e. The Notice Does Not Adequately Consider Countervailing Public-Health Harm

Factor Six requires consideration of the risk to public health. That inquiry includes the reasonably foreseeable consequences of the agency's intervention. If some persons are using SR-17018 to leave fentanyl, heroin, nitazenes, high-potency 7-hydroxymitragynine products, methadone, or buprenorphine, abruptly eliminating access may cause relapse, withdrawal, substitution, or return to a more lethal supply. Petitioners do not contend that unsupervised SR-17018 use is an approved treatment. They contend that DEA must investigate the displacement risk before taking an irreversible emergency step that may increase exposure to known lethal opioids.

The Notice contains no substitution analysis, no estimate of the population potentially using SR-17018 to discontinue or reduce use of other opioids, no discussion of barriers to evidence-based

treatment, and no transition or risk-communication plan. Although DEA notified HHS and received a response stating that FDA had identified no investigational or approved new drug applications and that HHS had no objection to temporary scheduling, the Notice identifies no consultation addressing addiction treatment, withdrawal management, or the foreseeable displacement of users to more lethal opioids.

These omissions leave DEA without an adequate basis to determine the net public-health consequences of immediate prohibition and therefore undermine the required finding that temporary scheduling is “necessary to avoid an imminent hazard to the public safety.” 21 U.S.C. § 811(h)(1), (3); *see Touby v. United States*, 500 U.S. 160, 165–67 (1991). The Notice contains no substitution analysis, no consultation with addiction-treatment specialists, no estimate of the affected population, no discussion of barriers to evidence-based treatment, and no transition or risk-communication plan. That omission is incompatible with a reasoned imminent-hazard determination. Courts reviewing agency action under the Administrative Procedure Act set aside decisions that are arbitrary, capricious, or otherwise not in accordance with law. 5 USCS § 702.

f. Immediate Schedule I Placement Threatens Research Needed to Resolve the Safety Questions DEA Identifies

DEA emphasizes the absence of established human safety data for SR-17018. Yet immediate Schedule I placement would increase the cost and difficulty of generating precisely that data. Research burdens do not independently bar temporary scheduling when the statutory standard is satisfied, but they are relevant to the appropriate remedy where the compound-specific evidence of an imminent hazard is limited and immediate control may impede development of the evidence necessary to resolve the identified uncertainties. A limited delay or severance of SR-17018 from the proposed temporary scheduling order, coupled with interagency coordination, continued monitoring, risk communication, and appropriate research safeguards, would permit development of a more complete evidentiary record without requiring DEA to disregard potential risks associated with the compound.

g. The Proposed Coverage of Isomers, Esters, Ethers, and Salts Requires Clarification

The proposed entry would cover SR-17018 and “its isomers, esters, ethers, salts, and salts of isomers, esters, and ethers, whenever the existence of such isomers, esters, ethers, and salts is possible within the specific chemical designation.” 91 Fed. Reg. at 39,946. Petitioners request that DEA identify the specific chemical species it believes fall within this language, explain the scientific basis for treating each covered species as presenting the same imminent hazard, and clarify whether the proposed entry would encompass any patented or investigational compound other than SR-17018 itself.

Without that clarification, researchers and other affected persons may be unable to determine the precise scope of the proposed control, and DEA risks extending immediate Schedule I restrictions beyond the particular compound for which it has purported to make the findings required by § 811(h).

If DEA intends the proposed language to reach chemically distinct species beyond SR-17018 itself, it must establish that each covered species satisfies the compound-specific statutory criteria for temporary scheduling rather than assuming that the asserted risks associated with SR-17018 automatically extend to every possible isomer, ester, ether, or salt within the proposed designation.

h. DEA Has Not Explained Why Less Disruptive Alternatives Are Inadequate

The record does not establish that immediately placing SR-17018 in Schedule I is the only reasonable means of addressing the potential risks identified in the Notice.

Before invoking an emergency mechanism that imposes immediate criminal and regulatory consequences without pre-enforcement judicial review, DEA should explain why narrower measures are inadequate. Available alternatives include:

- Severing SR-17018 from the other three compounds and continuing monitoring.
- Issuing a public-health advisory emphasizing delayed onset, redosing risk, polysubstance use, and overdose risk after loss of tolerance.
- Coordinating with FDA regarding misbranding, unapproved-drug marketing, contamination, and false therapeutic claims.
- Facilitating voluntary reporting by poison centers, laboratories, clinicians, and harm-reduction programs.
- Opening regular scheduling proceedings with an expedited HHS evaluation and formal hearing.
- Providing a research transition period and expedited registration pathway if control is ultimately imposed.

The Notice contains no reasoned comparison of these alternatives. The absence is especially important because DEA itself states that the action is not a significant regulatory action and therefore does not perform the cost-benefit analysis ordinarily associated with major regulatory interventions

i. Constitutional Avoidance and Preservation of Objections

Petitioners preserve all statutory and constitutional objections to applying § 811(h) in a manner that imposes severe research, property, professional, and criminal consequences for up to three years without a meaningful pre-deprivation hearing or pre-enforcement judicial review. In *Touby v. United States*, the Supreme Court rejected a facial nondelegation challenge to § 811(h), reasoning that the imminent-hazard standard, the statutory factors DEA must consider, the temporary duration of the scheduling order, and the availability of judicial review in a subsequent criminal prosecution

sufficiently constrained the Attorney General's authority. 500 U.S. 160, 165–69 (1991). *Touby* therefore reinforces the importance of applying those statutory constraints meaningfully to each substance proposed for temporary control; it does not authorize DEA to dilute the imminent-hazard standard through aggregate treatment of materially different compounds.

The present context raises distinct questions concerning the aggregation of separately identified compounds, the duration and practical finality of temporary control, procedural due process, nondelegation in the criminal context, interference with federally supported research, and the impairment of patent-backed interests. Patents constitute property protected by the Fifth Amendment, although regulatory action diminishing a patent's practical or economic value does not automatically establish a compensable taking. Here, immediate Schedule I placement may substantially impair Petitioners' ability to conduct research, develop the patented invention, maintain collaborations, pursue regulatory approval, and realize the patent's remaining economic value. Petitioners therefore preserve their objections under the Due Process and Takings Clauses, as well as any other constitutional objections arising from the manner in which DEA applies § 811(h) to SR-17018.

Petitioners further preserve any collateral structural constitutional claims that may be independently cognizable in federal district court notwithstanding a statutory administrative-review scheme. *See Axon Enterprise, Inc. v. FTC*, 598 U.S. 175, 180, 189–96 (2023). Petitioners do not contend that *Axon* authorizes pre-enforcement review of the merits of a temporary scheduling order notwithstanding 21 U.S.C. § 811(h)(6). Rather, *Axon* confirms that a statutory review scheme does not necessarily foreclose district-court jurisdiction over a distinct constitutional challenge directed to the legality of the agency process itself.

DEA need not resolve those constitutional questions to grant the requested relief. It can construe and apply § 811(h) narrowly, require a compound-specific evidentiary showing, sever SR-17018 from the proposed temporary scheduling order, and proceed through regular scheduling where the record presents unresolved scientific and public-policy questions rather than an imminent hazard attributable to SR-17018. That course would avoid unnecessary constitutional questions while producing a more complete and reliable administrative record

(E) Alternative Petition to Initiate Regular Scheduling Proceedings

a. Petition Under 21 C.F.R. § 1308.43

If DEA declines to withdraw all consideration of control, Petitioners hereby petition the Administrator to initiate regular proceedings under 21 U.S.C. § 811(a) to determine, on a complete and compound-specific record, whether SR-17018 should be controlled, remain uncontrolled, or be placed in a schedule other than Schedule I. *See* 21 U.S.C. § 811(a); 21 C.F.R. § 1308.43. This petition includes proposed regulatory text in Attachment A and a statement of grounds in this filing, thereby satisfying 21 C.F.R. § 1308.43(b).

b. Request for HHS Scientific and Medical Evaluation

Before initiating regular proceedings to permanently control SR-17018, DEA must gather the necessary data and request from HHS a scientific and medical evaluation and scheduling recommendation. 21 U.S.C. § 811(b); 21 C.F.R. § 1308.43(d). Petitioners request that DEA refer SR-17018 to HHS for a separate, compound-specific evaluation addressing:

- SR-17018's receptor pharmacology, intrinsic efficacy, signaling profile, and comparison with fentanyl, morphine, buprenorphine, and other relevant ligands.
- Preclinical evidence concerning analgesia, respiratory effects, tolerance, dependence, withdrawal, reinforcement, and abuse-liability data.
- Known human exposures, toxicology, poison-center reports, emergency presentations, fatalities, polysubstance patterns, and analytical limitations.
- The evidentiary quality and limitations of online self-reports concerning SR-17018.
- Potential therapeutic-development pathways for pain and opioid use disorder, including whether Schedule I control would materially impede research.
- Public-health substitution and displacement risks if access is abruptly eliminated.
- The federal investment and patent interests associated with the compound and related research.
- Whether tailored controls, research accommodations, or another schedule would adequately address any demonstrated risk.

In addition to the matters appropriately addressed through HHS's scientific and medical evaluation, Petitioners request that DEA separately consider the federal investment and patent interests associated with SR-17018 and related research; the extent to which Schedule I control would materially impede continued investigation; and whether tailored controls, research accommodations, delayed action, or placement in a schedule other than Schedule I would adequately address any demonstrated risk.

Under 21 U.S.C. § 811(b), the Attorney General must request the Secretary of HHS's scientific and medical evaluation and scheduling recommendation before initiating proceedings to control a drug or other substance under § 811(a). HHS's recommendations are binding on the Attorney General as to scientific and medical matters. If the Secretary recommends that SR-17018 not be controlled, the Attorney General may not control it through the regular scheduling process. *Id.*; 21 C.F.R. § 1308.43(d).

c. Request for Notice, Comment, and Formal Evidentiary Hearing

Upon initiation of regular scheduling proceedings and publication of a proposed rule, Petitioners request an opportunity to submit comments and objections and a formal evidentiary hearing under 21 U.S.C. § 811(a), 5 U.S.C. §§ 556–557, and 21 C.F.R. §§ 1308.41–.45 and 1316.41–.68. Because 21 C.F.R. § 1308.44(a) requires a written hearing request within thirty days after publication of a proposed rule, Petitioners ask DEA to treat this filing as advance notice of their intent to request and participate in the hearing and to provide express notice of the applicable filing deadline. Petitioners will submit a conforming written request under 21 C.F.R. §§ 1308.44(a) and 1316.47 upon publication of the proposed rule.

Any interested person desiring a hearing on a proposed scheduling rulemaking must file a written request within thirty days after publication of the notice of proposed rulemaking in the *Federal Register*. 21 C.F.R. § 1308.44(a). A person filing a hearing request need not separately file a notice of appearance because the hearing request is deemed to constitute such notice. *Id.* § 1308.44(b). If all interested persons waive or are deemed to waive their opportunity for a hearing, the Administrator may cancel the hearing and issue a final order without one. *Id.* § 1308.44(e).

d. Burden and Record

At any hearing conducted as part of a regular scheduling proceeding, DEA, as the proponent of the proposed rule, bears the burden of proving that the statutory criteria for the proposed scheduling action are satisfied. 21 C.F.R. § 1316.56. The administrative record should be compound-specific, transparent, and sufficient to permit meaningful adversarial testing. Petitioners request access, to the fullest extent permitted by law, to the data, analytical reports, toxicology materials, online-forum search methodology, source documents, and interagency communications on which DEA relies, subject to applicable confidentiality protections, lawful redactions, and protective treatment for confidential research or personally identifying information. Petitioners further request that DEA identify any material withheld from inspection and state the legal basis for its withholding.

e. Requested Hearing Issues and Proposed Evidentiary Record

Petitioners propose the following issues for resolution in any formal hearing initiated under regular scheduling proceedings:

1. Whether SR-17018 has a high potential for abuse and what evidentiary standard governs that determination.
2. The reliability and significance of the two NFLIS-Drug reports and the RaDAR samples attributed to SR-17018.
3. Whether any fatality, nonfatal overdose, emergency-department presentation, poison-center event, or other serious adverse event is causally attributable to SR-17018.

4. The extent to which DEA may rely on cyclochlorphine or other compounds to establish the risk posed by SR-17018.
5. SR-17018's receptor pharmacology, efficacy, signaling profile, pharmacokinetics, respiratory effects, tolerance, dependence, withdrawal effects, reinforcement, and abuse liability.
6. The scientific meaning and limitations of the terms "biased agonist," "partial agonist," "orphine," and "synthetic opioid" as applied to SR-17018.
7. The history, scope, duration, significance, and primary motivations of human use, including use for withdrawal management, analgesia, euphoria, and tolerance modification.
8. The reliability, representativeness, and proper interpretation of online forum evidence and NDEWS web-monitoring materials.
9. The likely public-health consequences of removing SR-17018 from circulation, including the risks of unmanaged withdrawal, relapse, substitution, return to fentanyl, heroin, nitazenes, or other high-risk opioids.
10. The availability and accessibility of approved medications for opioid use disorder among the populations reportedly using SR-17018.
11. The effect of Schedule I placement on existing and planned research, grants, samples, collaborations, publications, intellectual property, licensing, and therapeutic development.
12. Whether the proposed coverage of isomers, esters, ethers, and salts is scientifically and legally justified and sufficiently definite.
13. Whether the statutory criteria support placement of SR-17018 in any controlled-substance schedule and whether, alternatively, targeted enforcement, research safeguards, risk communications, continued monitoring, or other measures would adequately address any demonstrated risk without immediate Schedule I placement.
14. Whether controlling SR-17018 is consistent with the statutory factors, constitutional constraints, and reasoned decision-making requirements.

Petitioners anticipate presenting testimony and evidence from medicinal chemists, pharmacologists, toxicologists, addiction-medicine clinicians, epidemiologists, public-health experts, patent and technology-transfer professionals, research administrators, affected individuals, and DEA or HHS witnesses with knowledge of the underlying data. The proposed record will include peer-reviewed articles, patents, federal grant materials, laboratory and institutional declarations, toxicology and seizure data, NDEWS materials, poison-center and medical evidence, evidence concerning access to medication treatment, and declarations describing the practical effect of Schedule I controls on research.

Petitioners also request a protective order or other procedures sufficient to protect unpublished research, trade secrets, patent-sensitive information, and confidential human-subject information from public disclosure while permitting meaningful agency and judicial review.

f. Requested Disposition and Expedited Schedule

Because DEA may issue the temporary scheduling order on or after July 31, 2026, Petitioners request the following expedited process:

1. Immediate written confirmation that DEA has received this filing and will place it before the Administrator for consideration.
2. A written confirmation that DEA will not issue a temporary scheduling order as to SR-17018 until it has ruled on the emergency request.
3. A conference with the Drug and Chemical Evaluation Section and counsel for the Administrator within two business days of filing.
4. Acceptance of supplemental declarations and scientific exhibits through August 29, 2026, without prejudice to later submissions in regular rulemaking.
5. A written decision prior to the issuance of any order temporarily adding SR-17018 to Schedule I], stating the factual and legal basis for the disposition.
6. If DEA denies relief, preservation and production of the complete administrative record considered in issuing the temporary order.
7. If DEA denies the requested relief and proceeds with temporary scheduling, preservation of the complete record underlying both the denial and the temporary scheduling decision, including the scientific, medical, toxicological, epidemiological, forensic, and interagency materials considered by DEA. Petitioners further request production of that record to the fullest extent permitted by law, identification of any withheld or redacted material, and a statement of the legal basis for each withholding or redaction.

The Administrative Procedure Act requires an agency to provide prompt notice when it denies a written application, petition, or other request made by an interested person in connection with an agency proceeding. Except when affirming a prior denial or when the denial is self-explanatory, the notice must include a brief statement of the grounds for denial. 5 U.S.C. § 555(e). Petitioners therefore request a prompt, reasoned written disposition sufficiently identifying the factual and legal grounds for DEA's decision and permitting Petitioners to apprise the agency of any material errors before a temporary scheduling order concerning SR-17018 is issued.

Conclusion

The evidence summarized in the Notice may justify concern and continued monitoring of SR-17018. It does not justify treating SR-17018 as interchangeable with cychlorphine or importing

cyclorphine's fatality record into a finding of imminent hazard for a scientifically distinct compound with two reported NFLIS encounters and no identified SR-specific fatality in the Notice.

DEA should withdraw the Notice as to SR-17018. At minimum, it should sever the compound, delay emergency action, obtain a focused HHS evaluation, and proceed through regular rulemaking with an evidentiary hearing.

Petitioners therefore respectfully request that DEA withdraw the Notice as to SR-17018. At minimum, DEA should sever SR-17018 from the proposed temporary scheduling order, delay emergency action, obtain a focused and compound-specific HHS scientific and medical evaluation, and proceed through regular scheduling under 21 U.S.C. § 811(a)–(b), with an opportunity for notice, objections, and a formal evidentiary hearing.

All notices to be sent pursuant to the proceeding should be addressed to Petitioners.

Laura M. Bohn, Ph.D. [REDACTED]	Thomas D. Bannister, Ph.D. [REDACTED]
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With copies to:

Robert T. Rush, Esq. Law Office of Robert T. Rush 600 17th Street, Suite 2800 South Denver, Colorado 80202 RRush@rrushlaw.com	Melissa E. Dean, Esq. Minardi Law 2534 W. Curtis St. Tampa, FL 33614 Melissa@MinardiLaw.com
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Respectfully yours,

LAW OFFICE OF ROBERT T. RUSH



Robert T. Rush, Esq.

MINARDI LAW



Melissa E. Dean, Esq.

Counsel for Petitioners Laura M. Bohn, Ph.D. and Thomas D. Bannister, Ph.D.

ATTACHMENT A — PROPOSED REGULATORY TEXT

Petitioners propose the following alternatives depending on whether DEA acts before or after publication of a temporary scheduling order.

Alternative A - Before a Temporary Order Issues

DEA shall publish a withdrawal or correction of the July 1, 2026 Notice of Intent stating that 5,6-dichloro desmethylchlorphine (SR-17018) is severed from Docket No. DEA-1665 and that proposed paragraph 21 C.F.R. § 1308.11(h)(90) is withdrawn. The remaining proposed paragraphs shall be renumbered as appropriate.

Alternative B - If a Temporary Order Has Already Issued**PART 1308 - SCHEDULES OF CONTROLLED SUBSTANCES**

1. The authority citation for part 1308 continues to read as follows:

Authority: 21 U.S.C. 811, 812, 871(b), 956(b), unless otherwise noted.

2. In § 1308.11, paragraph (h)(90), concerning 5,6-dichloro desmethylchlorphine (SR-17018), is removed and reserved.

Agency finding: The presently available record does not establish that temporary Schedule I placement of SR-17018 is necessary to avoid an imminent hazard to public safety. DEA will continue monitoring and, if warranted, proceed under 21 U.S.C. § 811(a) after obtaining a compound-specific scientific and medical evaluation from HHS.

Alternative C - Regular Scheduling Proceeding

DEA shall initiate proceedings under 21 U.S.C. § 811(a) to determine whether SR-17018 should be controlled, transferred to a particular schedule, or remain uncontrolled. Any proposed rule shall be accompanied by the HHS scientific and medical evaluation, a compound-specific eight-factor analysis, an opportunity for written comment, and notice of the right to request a formal hearing.

If DEA determines that further scheduling consideration is warranted, DEA shall request from the Secretary of Health and Human Services a compound-specific scientific and medical evaluation and scheduling recommendation concerning SR-17018 under 21 U.S.C. § 811(b). After receiving that evaluation and recommendation, DEA may initiate regular scheduling proceedings under 21 U.S.C. § 811(a) to determine, on a complete and compound-specific record, whether SR-17018 should remain uncontrolled or be placed in an appropriate schedule.

Any proposed scheduling rule shall provide notice of the opportunity to request a formal hearing and otherwise comply with 21 U.S.C. § 811(a), 5 U.S.C. §§ 556–557, and applicable DEA regulations.

ATTACHMENT B — PROPOSED ISSUES FOR FORMAL HEARING

1. Whether SR-17018 has a high potential for abuse and what evidentiary standard governs that determination.
2. The reliability and significance of the two NFLIS-Drug reports and the RaDAR samples attributed to SR-17018.
3. Whether any fatality, nonfatal overdose, emergency-department presentation, poison-center event, or other serious adverse event is causally attributable to SR-17018.
4. The extent to which DEA may rely on cyclochlorophine or other compounds to establish the risk posed by SR-17018.
5. SR-17018's receptor pharmacology, efficacy, signaling profile, pharmacokinetics, respiratory effects, tolerance, dependence, withdrawal effects, reinforcement, and abuse liability.
6. The scientific meaning and limitations of the terms "biased agonist," "partial agonist," "orphan," and "synthetic opioid" as applied to SR-17018.
7. The history, scope, duration, significance, and primary motivations of human use, including use for withdrawal management, analgesia, euphoria, and tolerance modification.
8. The reliability, representativeness, and proper interpretation of online forum evidence and NDEWS web-monitoring materials.
9. The likely public-health consequences of removing SR-17018 from circulation, including the risks of unmanaged withdrawal, relapse, substitution, return to fentanyl, heroin, nitazenes, or other high-risk opioids, increased use of 7-hydroxymitragynine products, and disruption of or changes in engagement with methadone or buprenorphine treatment.
10. The availability and accessibility of approved medications for opioid use disorder among the populations reportedly using SR-17018.
11. The effect of Schedule I placement on existing and planned research, grants, samples, collaborations, publications, intellectual property, licensing, and therapeutic development.
12. Whether the proposed coverage of isomers, esters, ethers, and salts is scientifically and legally justified and sufficiently definite.
13. Whether the statutory criteria support placement of SR-17018 in any controlled-substance schedule and whether, alternatively, targeted enforcement, research safeguards, risk communications, continued monitoring, or other measures would adequately address any demonstrated risk without immediate Schedule I placement.
14. Whether controlling SR-17018 is consistent with the statutory factors, constitutional constraints, and reasoned decision-making requirements.

ATTACHMENT C — PROPOSED EXHIBIT AND DECLARATION LIST

Exhibit	Description
Exhibit 1	Declaration of Laura M. Bohn, Ph.D., addressing development, pharmacology, research history, current projects, institutional burdens, and public-health significance.
Exhibit 2	Declaration of Thomas D. Bannister, Ph.D., addressing medicinal chemistry, patent interests, federal support, research and commercialization pathways, and compound differentiation.
Exhibit 3	U.S. Patent No. 10,751,335, Signaling-biased mu opioid receptor agonists.
Exhibit 4	Schmid et al., Cell (2017).
Exhibit 5	Grim et al., Neuropsychopharmacology (2020).
Exhibit 6	Pantouli et al., Neuropharmacology (2021).
Exhibit 7	Kudla et al., Pharmaceutics (2022).
Exhibit 8	NDEWS Web Monitoring Alert: Reddit Mentions of SR-17018 (Nov. 14, 2025).
Exhibit 9	Declarations from affected researchers, laboratory managers, research administrators, graduate students, and collaborators.
Exhibit 10	Declarations from addiction-medicine or pain clinicians addressing substitution risk and research needs.
Exhibit 11	Declarations from individuals with direct experience using SR-17018 to discontinue opioids, with identities protected as appropriate.
Exhibit 12	Compound-specific toxicology, poison-center, seizure, and laboratory data obtained from DEA, NIST, CFSRE, state laboratories, and other sources.
Exhibit 13	Institutional policies and cost estimates concerning Schedule I registration, security, sourcing, transfer, and compliance.
Exhibit 14	Economic and intellectual-property analysis regarding the effect of Schedule I placement on patent value, licensing, and development.
Exhibit 15	Public-health analysis of displacement to fentanyl, heroin, nitazenes, 7-hydroxymitragynine products, and other opioids.

ATTACHMENT D — SELECTED AUTHORITIES AND SCIENTIFIC LITERATURE**Statutes and Regulations**

- 5 U.S.C. §§ 553(e), 555(e), 556–557.
- 21 U.S.C. §§ 811(a)–(c), 811(h), 812, 877.
- 21 C.F.R. §§ 1308.41–1308.45, 1316.41–1316.68, 1321.01.
- Schedules of Controlled Substances: Temporary Placement of 5,6-Dichloro Brorphine, 5,6-Dichloro Desmethylchlorphine, N-Propionitrile Chlorphine, and Spirochlorphine in Schedule I of the Controlled Substances Act, 91 Fed. Reg. 39,940 (July 1, 2026).

Cases

- *Loper Bright Enterprises v. Raimondo*, 603 U.S. 369 (2024).
- *Axon Enterprise, Inc. v. FTC*, 598 U.S. 175, 180, 189-96 (2023)
- *Sisley v. U.S. Drug Enforcement Administration*, 11 F.4th 1029, 1034–36 (9th Cir. 2021).
- *Oil States Energy Services, LLC v. Greene’s Energy Group, LLC*, 584 U.S. 325, 342 (2018).
- *United States v. Kelly*, 874 F.3d 1037 (9th Cir. 2017).
- *Macktal v. Chao*, 286 F.3d 822, 825–26 (5th Cir. 2002).
- *Touby v. United States*, 500 U.S. 160, 165–69 (1991).
- *United States v. Emerson*, 846 F.2d 541 (9th Cir. 1988).

Scientific and Government Materials

- Cullen L. Schmid et al., *Bias Factor and Therapeutic Window Correlate to Predict Safer Opioid Analgesics*, 171 Cell 1165-1175.e13 (2017), doi:10.1016/j.cell.2017.10.035.
- Travis W. Grim et al., *A G Protein Signaling-Biased Agonist at the Mu-Opioid Receptor Reverses Morphine Tolerance While Preventing Morphine Withdrawal*, 45 Neuropsychopharmacology 416-425 (2020), doi:10.1038/s41386-019-0491-8.
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- National Drug Early Warning System, *Alert from the Web Monitoring Team: Reddit Mentions of SR-17018* (Nov. 14, 2025).
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