Regulation Z also covers expedited delivery fees as finance charges because such a fee is a ''condition'' of an extension of credit. As noted above, when an earned wage product provider offers a slower and faster loan, and the faster loan requires payment of an expedited delivery fee, the expedited delivery fee is a ''condition'' of the extension of that type of credit.

c. ''Tips'' and Similarly Labeled Payments

In connection with the extension of earned wage credit, some providers solicit consumers for what they variously describe as ''tips,'' ''gratuities,'' ''donations,'' ''voluntary contributions,'' or the like. The CFPB is aware of a wide range of practices used by credit providers to solicit these kinds of payments from consumers, including: default ''tip'' amounts that the consumer must remove each time to avoid being charged; suggesting particular ''tip'' amounts or percentages; suggesting or stating that ''tips'' serve to ensure the future supply of credit to the individual or other users; and including multiple prompts to ''tip'' throughout the process of receiving credit.

Whatever the exact practice used, when such ''tip'' payments are solicited and then paid in connection with the extension of credit, there is a clear and close connection between the ''tip'' and the associated extension of credit. In such circumstances, consumers pay the ''tip'' for the credit extended, and the credit is the direct and proximate cause of the ''tip.'' [44] That substantial connection between payment and associated extension of credit means that the payment is ''incident to . . . the extension of credit.'' [45] Indeed, as a practical matter, tips are a central source of revenue for the earned wage product providers that solicit them. For such providers, public data shows that consumers made ''tip'' payments in connection with about 73 percent of all such credit extensions, with such payments representing roughly the same share of consumer-side revenue for these providers.[46]

As explained above, a payment may be ''imposed directly or indirectly by the creditor'' and hence may be part of the finance charge even if the credit can be obtained without making the payment.[47] Under certain circumstances, ''tips'' and similarly styled consumer payments may be ''imposed directly or indirectly by the creditor'' such that they are part of the finance charge. A provider using its authority—real or implied—to exact a ''tip'' from a consumer in connection with an earned wage transaction has ''imposed'' the resulting consumer payment.[48] Relevant considerations when determining whether a ''tip'' or similar payment is imposed by the creditor as part of the finance charge include but are not limited to: soliciting a ''tip'' before or at the time of a credit extension (rather than some significant time after it); labeling the solicited payment with a term (such as ''tip'') that carries an expectation that the consumer will make such a payment in the normal course; setting default ''tip'' amounts or otherwise making it practically more difficult for the consumer to avoid leaving a ''tip''; suggesting ''tip'' amounts or percentages to the consumer; repeatedly soliciting ''tips,'' even in the course of a single transaction; and stating or otherwise implying, directly or indirectly, truthfully or otherwise, that ''tipping'' may impact subsequent access to or use of the product.[49]

III. Regulatory Matters

This is a proposed interpretive rule issued under the CFPB's authority to interpret TILA and Regulation Z, including under section 1022(b)(1) of the Consumer Financial Protection Act of 2010, which authorizes guidance as may be necessary or appropriate to enable the CFPB to administer and carry out the purposes and objectives of Federal consumer financial laws.[50] While not required under the Administrative Procedure Act (APA), the CFPB is soliciting comments on the proposal and may make revisions when it issues a final interpretive rule as appropriate in light of feedback received.

By operation of TILA section 130(f), no provision of TILA sections 130, 108(b), 108(c), 108(e), or section 112 imposing any liability would apply to any act done or omitted in good faith in conformity with the final interpretive rule, notwithstanding that after such act or omission has occurred, the final interpretive rule is amended, rescinded, or determined by judicial or other authority to be invalid for any reason.[51]

The CFPB has determined that this proposed interpretive rule, if finalized, would not impose any new or revise any existing recordkeeping, reporting, or disclosure requirements on covered entities or members of the public that would be collections of information requiring approval by the Office of Management and Budget under the Paperwork Reduction Act.[52]

Rohit Chopra,

Director, Consumer Financial Protection Bureau.

[FR Doc. 2024–16827 Filed 7–30–24; 8:45 am]

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in the regulation (or statute) to disagree with the Board's considered 1996 position on payment for voluntary services. As the Board discerned, it does not matter that it is possible to obtain credit without the relevant service if the service is a feature of the loan affecting the total price paid for the credit.

[44] Such payments are not tips or gratuities in any traditional sense. Consumers generally pay tips to individual workers in the service industry, not to firms (whether partnered with the employer or otherwise) for lending them money. Providers should exercise care in ensuring that the language they use here is not deceptive.

[45] *See supra* note 35.

[46] *See* Cal. Dep't of Fin. Prot. & Innovation, *supra* note 30, at 1, 7.

[47] As explained above, payments that are not required as a condition of the credit but are nonetheless incident to it can be ''imposed directly or indirectly by the creditor.'' Including only ''conditions of'' the extension of credit in the finance charge would improperly read ''incident to'' out of Regulation Z's definition of finance charge, and a creditor can ''impose'' a cost on a consumer even if the cost is not required for the extension of credit.

[48] A consumer's reasonable understanding that a provider expects a ''tip'' in connection with a transaction is evidence that the provider exacts it as if by authority. This kind of reasonable understanding does not depend on whether ''tipping'' impacts the supply of credit to the consumer now or in the future.

[49] The presence or absence of one or all of these considerations may not be determinative. The importance and relevance of these and other considerations will vary in the context of a particular product and how it is offered or provided to consumers.

[50] 12 U.S.C. 5512(b)(1).

[51] 15 U.S.C. 1640(f).

[52] 44 U.S.C. 3501–3521.

CONSUMER PRODUCT SAFETY COMMISSION

16 CFR Part 1500

[CPSC Docket No. CPSC–2021–0015]

Banned Hazardous Substances: Aerosol Duster Products Containing More Than 18 mg in Any Combination of HFC–152a and/or HFC–134a

AGENCY: Consumer Product Safety Commission.

ACTION: Notice of proposed rulemaking.

SUMMARY: The U.S. Consumer Product Safety Commission (Commission or CPSC) is proposing to declare that any aerosol duster products that contain more than 18 mg in any combination of HFC–152a and/or HFC–134a are banned hazardous substances under the Federal Hazardous Substances Act (FHSA). For the ten-year period from 2012 to 2021, CPSC is aware of more than 1,000 deaths, and estimates 21,700 treated injuries involving the inhalation of aerosol duster products. The proposed

rule addresses deaths and injuries associated with the propellants HFC–152a and HFC–134a used in aerosol duster products. The Commission is providing an opportunity for interested parties to submit written comments on this notice of proposed rulemaking (NPR).

DATES: Written comments must be received by September 30, 2024.

ADDRESSES:

Written Comments:

Comments related to the Paperwork Reduction Act aspects of the proposed rule should be directed to the Office of Information and Regulatory Affairs, OMB, Attn: CPSC Desk Officer, FAX: 202–395–6974, or emailed to *oira_submission@omb.eop.gov.*

Other written comments in response to the proposed rule, identified by Docket No. CPSC–2021–0015 may be submitted by any of the following methods:

Electronic Submissions: Submit electronic comments to the Federal eRulemaking Portal at: *www.regulations.gov.* Follow the instructions for submitting comments. CPSC typically does not accept comments submitted by email, except as described below. CPSC encourages you to submit electronic comments by using the Federal eRulemaking Portal, as described above.

Mail/Hand Delivery/Courier/Written Submissions: Submit comments by mail/hand delivery/courier to: Office of the Secretary, Consumer Product Safety Commission, 4330 East West Highway, Bethesda, MD 20814; telephone: (301) 504–7479. If you wish to submit confidential business information, trade secret information, or other sensitive or protected information that you do not want to be available to the public, you may submit such comments by mail, hand delivery, courier, or you may email them to: *cpsc-os@cpsc.gov*.

Instructions: All submissions must include the agency name and docket number. CPSC may post all comments without change, including any personal identifiers, contact information, or other personal information provided to: *www.regulations.gov.* Do not submit through this website: confidential business information, trade secret information, or other sensitive or protected information that you do not want to be available to the public. If you wish to submit such information, please submit it according to the instructions for mail/hand delivery/courier/written submissions.

Docket for NPR: For access to the docket to read background documents or comments received, go to: *www.regulations.gov,* insert the docket number CPSC–2021–0015 into the ''Search'' box, and follow the prompts.

FOR FURTHER INFORMATION CONTACT: Mary Kelleher, Directorate for Health Sciences, Consumer Product Safety Commission, National Product Testing and Evaluation Center, 5 Research Place, Rockville, MD 20850; telephone: 240–429–4894; *mkelleher@cpsc.gov.*

SUPPLEMENTARY INFORMATION: In this NPR, the Commission proposes to declare any aerosol duster canisters containing more than 18 mg of the hazardous chemicals HFC–152a and/or HFC–134a to be banned hazardous substances under the FHSA. From 2012 to 2021, inhalation of these products resulted in 1,039 known deaths and an estimated 21,700 emergency department (ED) treated injuries in the United States. Although aerosol duster products that do not contain these hazardous substances would likely be more expensive, over 30 years the proposed rule is projected to yield net benefits of nearly $2 billion, with more than 16 dollars of benefit for every dollar of cost. Furthermore, aerosol duster products will remain available and affordable alternatives such as electric dusters are also available.

I. Background

On April 2, 2021, Families United Against Inhalant Abuse (FUAIA) submitted a petition requesting that the Commission initiate rulemaking to adopt a mandatory safety standard to address the hazards associated with aerosol duster products used for cleaning electronics and other items containing the chemical 1,1-difluorethane, or any derivative thereof. The petition requested CPSC conduct rulemaking to address the numerous deaths and injuries associated with inhalant abuse of aerosol duster products. Specifically, the petition requested a performance standard requiring that manufacturers add an aversive agent (bitterant other than denatonium benzoate) to all duster aerosol products at a level of 30–40 ppm, and it requested a required warning stating: ''DANGER: DEATH—This product can kill you if you breath [sic] it.'' [1]

On June 29, 2021, the Commission published in the **Federal Register** a request for comments on the petition. 86 FR 34171. On July 20, 2022, staff submitted a briefing package to the Commission regarding the petition.[2] On July 26, 2022, the Commission voted to defer action on the petition to allow staff to conduct further research.[3] On July 26, 2023, staff submitted an updated briefing package to the Commission regarding the petition.[4] The Commission granted the petition on August 1, 2023, directing staff to initiate rulemaking to address the inhalation hazard associated with aerosol duster products.[5]

II. Statutory Authority

This rulemaking is conducted under the provisions of the FHSA and the Consumer Product Safety Act (CPSA). 15 U.S.C. 1261–1278; 15 U.S.C. 2058. The rulemaking proposal involves two elements. First, pursuant to sections 2(f)(1)(A), 2(q)(1)(B), and 3 of the FHSA, the Commission is proposing to ban any aerosol duster product containing more than 18 mg of either of two hydrofluorocarbon propellants—1,1-difluoroethane (HFC–152a, CAS # 75–37–6) and 1,1,1,2-tetrafluoroethane (HFC–134a, CAS # 811–97–2)—or of a combination of these propellants. 15 U.S.C. 1261(f)(1)(A), (q)(1)(B), 1262 (proposed 16 CFR 1500.17(a)(14)). Second, to prevent circumvention of the proposed ban, pursuant to section 9(g)(2) of the CPSA, the Commission is proposing a stockpiling prohibition that would prohibit a manufacturer from stockpiling banned aerosol duster products containing above the specified amount of HFC–152a and/or HFC–134a that are subject to the proposed ban. 15 U.S.C. 2058(g)(2).

More specifically, the Commission is proposing to declare that any aerosol duster canister containing more than 18 mg of HFC–152a and/or HFC–134a to be a ''hazardous substance'' and a ''banned hazardous substance'' within the meaning of sections 2(f)(1)(A) and

[1] The petition is available at *https://www.cpsc.gov/Regulations-Laws--Standards/Rulemaking/Petitions.* The petitioner also requested that CPSC require retailers to limit multiple duster can purchases during a one-month time period; the Commission, however, explained that it does not have rulemaking authority over such personal purchasing decisions. 86 FR 34171, n.1 (June 29, 2021).

[2] *www.cpsc.gov/s3fs-public/Petition-Requesting-Rulemaking-to-Establish-Safety-Standard_0.pdf?VersionId=GNEl7pYZUBOxf1BLSC0f4.X6TlA8gT4f.*

[3] *www.cpsc.gov/s3fs-public/RCA-Petition-Requesting-Rulemaking-to-Establish-Safety-Standard-for-Aerosol-Dusters-Products-Petition-CP-21-1.pdf?VersionId=uD1mraIGCZcjBd9xiyZsanVRbngVzUvP.*

[4] *www.cpsc.gov/s3fs-public/Petition-Requesting-Rulemaking-to-Establish-Safety-Standard-for-Aerosol-Duster-Products-Petition-CP-21-1.pdf?VersionId=.NohA6DG6WsXh_tsjhGuA7RuqMCOvxSW.*

[5] *www.cpsc.gov/s3fs-public/RCAPetitionRequestingRulemakingtoEstablishSafetyStandardforAerosolDusterProductsPetitionCP21_1.pdf?VersionId=nQcgEM4wvCJE97zmhwYCdAkwuluYerIt.*

(q)(1)(B) of the FHSA.[6] 15 U.S.C. 1261(f)(1)(A), (q)(1)(B). Section 2(q)(1)(B) of the FHSA defines a ''banned hazardous substance'' to include any hazardous substance intended, or packaged in a form suitable, for household use which, notwithstanding the precautionary labeling required by the FHSA, presents such a hazard that keeping the substance out of interstate commerce is the only adequate means to protect the public health and safety. 15 U.S.C. 1261(q)(1)(B).

A proceeding to classify a hazardous substance as a ''banned hazardous substance'' under section 2(q)(1)(B) of the FHSA is governed by the requirements set forth in section 3 of the FHSA. *See* 15 U.S.C. 1261(q)(2) and 1262. The proposed rule begins the rulemaking process in accordance with the requirements of sections 3(a) and (h) of the FHSA. See 15 U.S.C. 1262(a) and (h). Pursuant to section 3(a), the Commission is proposing to declare any aerosol duster canister containing more than 18 mg in any combination of HFC–152a and/or HFC–134a to be a hazardous substance. In order to declare that a hazardous substance is banned, section 3(h) of the FHSA requires the Commission to publish in the **Federal Register** the text of a proposed rule, including any alternatives together with a preliminary regulatory analysis containing: (1) a preliminary description of the potential benefits and costs of the proposed rule; (2) a discussion of the reasons why any standard or portion of a standard submitted to the Commission was not published as the proposed rule; (3) a preliminary determination regarding why the voluntary standards process would not, within a reasonable time, result in the development of a voluntary standard that would eliminate or adequately reduce the risk of injury identified in the rule; and (4) a description of any reasonable alternatives to the proposed rule, together with a summary description of the potential benefits and costs, and a brief explanation of why such alternatives should not be published as the proposed rule. 15 U.S.C. 1262(h).

Before issuing a final rule banning any hazardous substance, the Commission must publish the text of the final rule and a final regulatory analysis that includes: (1) a description of the potential benefits and costs of the rule (including costs and benefits that cannot be quantified in monetary terms, and identification of those likely to receive the benefits and bear the costs); (2) a description of alternatives considered by the Commission (including a description of their potential benefits and costs and an explanation of why the alternatives were not chosen); and (3) a summary of significant issues raised by comments on the preliminary regulatory analysis and a summary of the assessment by the Commission of such issues. 15 U.S.C. 1262(i)(1). The Commission must also make findings that: (1) any relevant voluntary standard is unlikely to adequately reduce the risk of injury or substantial compliance with the voluntary standard is unlikely; (2) the expected benefits of the regulation bear a reasonable relationship to expected costs; and (3) the regulation imposes the least burdensome requirement that would adequately reduce the risk of injury. 15 U.S.C. 1262(i)(2).

III. The Product

A. Description of the Product

Aerosol duster products use a trigger or similar means to release a propellant[7] (typically a hydrofluorocarbon) through an orifice or attachment such as a nozzle or straw for the purpose of blowing and removing dust and debris from hard-to-reach places. Although sometimes referred to as ''canned air,'' aerosol duster products actually contain essentially 100 percent propellent,[8] which is typically a chemical such as a hydrofluorocarbon that can be compressed into a liquid for storage. Each such aerosol duster canister typically contains about 3 to 20 ounces (85 g to 567 g) of compressed liquid in equilibrium with a small amount of evaporated gas or vapor of that same chemical. The gas or vapor, consisting of nearly pure propellant chemical, is expelled when the trigger or similar means is activated, which causes more of the liquid to evaporate into gas or vapor within the canister in order to return to equilibrium. This allows multiple uses per canister. Figure 1 below, from US Patent, US–9234123–B2[9] illustrates an example of an aerosol duster product showing the propellent liquid and vapor existing in equilibrium.

[6] The Commission voted 5–0 to publish this proposed rule.

[7] Aerosol propellant is a liquid which exists in equilibrium also as a gas, or compressed gas that is used to expel aerosol content from a pressurized container.

[8] Various aerosol duster products include trace amounts of denatonium benzoate, or other bitterants in order to discourage inhalant abuse.

[9] *https://patentcenter.uspto.gov/applications/13848372.*

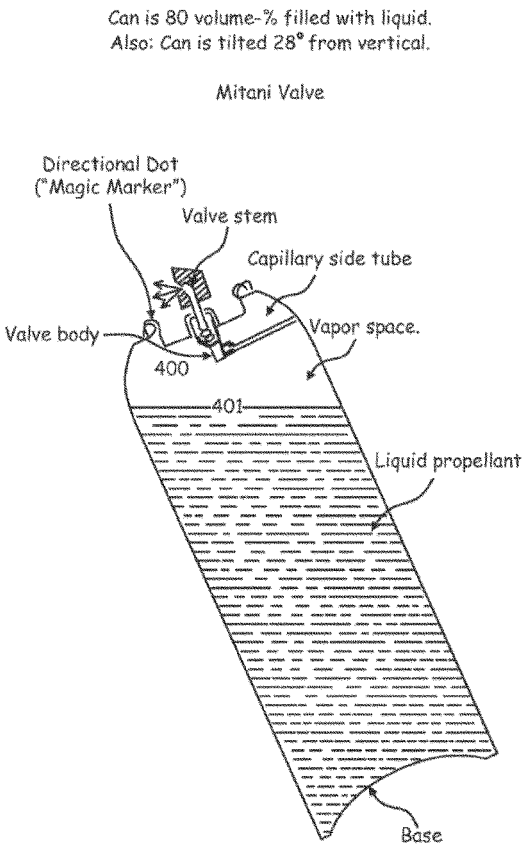


Figure 1: Illustration of the Contents of an Aerosol Duster Product.

Aerosol duster products are sold under a variety of brand names and are available in various brick and mortar stores and online retail locations. They are relatively inexpensive to purchase and easy to obtain either in stores or online. For example, online retailers sell individual canisters for about $8–10 per canister, and some retailers offer a discount when the product is purchased in bulk. Aerosol duster products are often referred to as electronics dusters, computer keyboard cleaners, canned air or compressed air dusters, aerosol cans or spray, and electronics air cleaners, among other names. (See Figure 2 below for examples of 10 oz aerosol duster products).

Figure 2: Aerosol Duster Product Examples.

Aerosol duster products typically use one or more of three propellants: 1,1-difluorethane (HFC–152a, CAS #75–37–6), 1,1,1,2-tetrafluoroethane (HFC–134a, CAS #811–97–2), and/or trans-1,3,3,3-tetrafluoropropene (HFO–1234ze, CAS

#29118–24–9). HFC–152a and HFC–134a are known to be hazardous as explained in this Notice. According to Euromonitor, approximately 87 percent of aerosol duster products available for sale in the U.S. use the propellant HFC–152a and 11 percent use HFC–134a. HFO–1234ze is a new propellant. The abuse potential for HFO–1234ze is unknown due to its relatively low use in consumer applications. Similarly, other effects on humans have not been reported. Further discussion about HFO–1234ze can be found in Tab B of the July 2023 staff petition briefing package.[10]

In order to determine the amount of propellant released from a single use of an aerosol duster product, laboratory sciences staff conducted testing of various aerosol duster products,[11] and based on that testing, determined that a trigger pull from a single aerosol duster canister lasting 5 seconds [12] releases 7.53 grams of propellant, when not using the straw provided with the product. This information regarding the 5 second time per trigger pull helped staff better understand how much propellant inhalant abusers are able to inhale with a single trigger pull of an aerosol duster product.

B. Scope of Products Subject to the NPR

Aerosol duster products are generally intended to be used for cleaning and blowing off dust from electronics as well as other household items. This NPR would apply only to aerosol duster products that contain the propellants HFC–152a or HFC–134a. Aerosol duster products using HFO–1234ze (or other substances) as a propellant are outside the scope of this NPR. Other examples of aerosol products that are outside the scope of this NPR include products that use HFC–152a or HFC–134a as propellants in freeze sprays used to cool circuit boards, automotive refrigerants, and medical freeze sprays used to cool tissue specimens as well as aerosol products that use HFC–152a or HFC–134a as propellants but include substantial additional components (such as air fresheners, paints, lubrication oils, body sprays, and silicone lubricant sprays for food pans).

C. Alternatives to Aerosol Duster Products With HFC–152a and HFC–134a

Alternatives to aerosol duster products are currently being sold for the same purpose as aerosol duster products. For example, alternatives include compressed air dusters which use corded or cordless electric pumps, or hand pumps that compress air and blow and/or vacuum it through a nozzle to remove dirt and debris. According to data collected in 2023, the average price of an electric duster is approximately $56, similar to the price of seven disposable aerosol duster canisters.[13] Staff tested battery operated USB rechargeable duster devices. The goal was to compare air speeds, measured in meters/second (m/s), generated by the battery powered devices to the speeds generated by an aerosol duster product. Three battery powered devices and two name-brand aerosol dusters were chosen for the comparison. Staff concluded that battery powered air duster devices generate comparable air speeds to the propellant speeds of aerosol duster products. See Tab D of the July 26, 2023, staff briefing package for more details on electronic dusters.[14] Carbon dioxide (CO_2) cartridge dusters that use disposable CO_2 cartridges to blow CO_2 through a nozzle to remove dirt and debris are available as well. Consumers can also use vacuum cleaners to remove dust. Thus, a number of alternative products exist that provide similar utility to that provided by aerosol duster products.

IV. Description of the Hazard

Aerosol duster products can cause significant toxicity or death if used as inhalants (Williams, 2007). Inhalants are volatile substances that produce chemical vapors that can be inhaled to induce psychoactive, or mind-altering, effects.[15] The inhalants in aerosol duster products are legally sold for purposes other than use as inhalants, are widely available, and are inexpensive. Inhalant abusers include males and females ranging in age from teenagers to adults in their 60s. Approximately 10 to 50 percent of cases of inhalant abuse may lead to abuse or dependance, depending on the characteristics of the population studied (Perron et al., 2021).

Staff has identified two toxic substances, HFC–152a and HFC–134a, that are commonly used as propellants in aerosol duster products and are widely used for inhalant abuse. Inhalant abusers use propellants to get ''high'' (Koehler and Henninger, 2014). These propellants can be sniffed, snorted or sprayed,[16] huffed,[17] or bagged [18] as inhalants to obtain a rapid euphoric effect (DEA, 2020). The euphoric effect only lasts a few minutes, requiring the repeat use of an aerosol duster product every few minutes to maintain the euphoria. These propellants can damage the heart when abused, making an individual more susceptible to a heart attack or arrhythmia [19] after an individual inhales the propellant. The abuse potential of the propellants HFC–152a and HFC–134a are further discussed below.

A. Inhalants Used in Aerosol Duster Products

1. HFC–152a (1,1-difluorethane)

HFC–152a is widely used as a propellant in the aerosol duster product market.[20] HFC–152a works through specific brain receptors [21] such as glutamate/N-methyl-D-aspartate (NMDA),[22] gamma-aminobutyric acid (GABA),[23] and dopamine [24] to elicit euphoria (Duncan and Lawrence, 2013). Aerosol duster products, especially those containing HFC–152a, are the ''drug of choice'' for many who use inhalants because they are easy to obtain, inexpensive, and contain 100 percent HFC–152a without any additional components such as paint or air freshener in the propellant (Beauvais and Oetting, 1987). After inhalation of

[10] *www.cpsc.gov/s3fs-public/Petition-Requesting-Rulemaking-to-Establish-Safety-Standard-for-Aerosol-Duster-Products-Petition-CP-21-1.pdf?VersionId=.NohA6DG6WsXh_tsjhGuA7RuqMCOvxSW.*

[11] *www.cpsc.gov/s3fs-public/Petition-Requesting-Rulemaking-to-Establish-Safety-Standard-for-Aerosol-Duster-Products-Petition-CP-21-1.pdf?VersionId=.NohA6DG6WsXh_tsjhGuA7RuqMCOvxSW,* July 26, 2023, Table 9, Page 27.

[12] A trigger pull lasting 5 seconds was chosen based on online video research which found users inhaling aerosol dusters without any straw attachment for that length of time: *https://youtu.be/FjlazUNE2-8?si=WsA4nfSbLX_jJ2SR&t=40.* This reference video shows that the euphoric/high effects appear to occur with a single trigger pull of five seconds.

[13] Aerosol Duster Supporting Database, August 2023. (*https://www.cpsc.gov/content/Aerosol-Duster-Supporting-Database*).

[14] *www.cpsc.gov/s3fs-public/Petition-Requesting-Rulemaking-to-Establish-Safety-Standard-for-Aerosol-Duster-Products-Petition-CP-21-1.pdf?VersionId=.NohA6DG6WsXh_tsjhGuA7RuqMCOvxSW.*

[15] See *nida.nih.gov/publications/research-reports/inhalants/what-are-inhalants.*

[16] Inhaling or spraying refers to inhaling the substance into the nose or mouth directly from the container.

[17] Huffing refers to placing a bag saturated with a substance over the mouth and using the nose or mouth to inhale the concentrated fumes.

[18] Bagging refers to concentrating an aerosol in a bag before inhaling.

[19] A heart arrhythmia is an irregular heartbeat caused by electrical problems in the heart.

[20] According to Euromonitor, approximately 87 percent of aerosol duster products available for sale in the U.S. use the propellant HFC–152a and 11 percent use HFC–134a.

[21] Proteins that serve as a sensor for a particulate type of molecules.

[22] The NMDA receptors are a class of receptors that respond to the neurotransmitter N-methyl-D-aspartate.

[23] The GABA receptors are a class of receptors that respond to the neurotransmitter gamma-aminobutyric acid.

[24] Dopamine is a brain neurotransmitter.

such a lipophilic [25] propellant, the substance is rapidly absorbed into the pulmonary vasculature, going directly into the lungs and easily crossing the blood-brain barrier into the brain to exert its euphoric effects. The onset of HFC–152a intoxication is rapid, and the intoxication effects are brief and dose-related, ranging from euphoria, decreased inhibition, motor excitation, and light-headedness (Koehler and Henninger, 2014).

Toxicity in humans can occur after an acute or chronic exposure to HFC–152a (Poisindex, 2021). Severe HFC–152a toxicity can cause a depressed mental state, respiratory depression, pulmonary edema, hepatic injury, and death (Poisindex, 2021). Death can occur due to sudden sniffing death syndrome (SSDS), which was first described in 1970 (Bass, 1970; George et al., 2021). Individuals inhale fluorinated hydrocarbons to become ''high'' and, if physical exertion or stress occurs, the inhaler may collapse and die. (Smeeton and Clark, 1985; Kamm, 1975; Dingle and Williams, 2019; Poisindex, 2021). Predicting the toxicity of inhaling a certain number of aerosol duster canisters is difficult because there is no clear dose-response evident in the medical literature. Death from abusing aerosol duster products is not dose dependent.[26] The medical literature indicates the use of only one canister has resulted in death (Xiong et al., 2004), while in another case inhaling multiple canisters over several years did not cause death (Peicher and Maalofouf, 2017). However, abrupt cessation of HFC–152a abuse can induce withdrawal [27] with tremors, excessive sweating, nausea, vomiting, depression, anxiety, irritability, psychosis, and hallucinations (Custer et al., 2020).

2. HFC–134a (1,1,1,2-tetrafluoroethane)

HFC–134a is another substance used as a propellant in aerosol duster products. HFC–134a is a member of the anesthetic drug class [28] (Shah et al., 2015). HFC–152a and HFC–134a have different binding mechanisms.[29] It is unclear whether the same addictive properties of HFC–152a translate to HFC–134a, but data from CPSC's Consumer Product Safety Risk Management System (CPSRMS) discussed below, show that multiple individuals have died after inhaling HFC–134a. Two other papers from medical literature demonstrate that acute exposure of HFC–134a from inhalation can be harmful (Romero et al., 2022; Burke et al., 2020). Several papers have indicated that inhalation with acute exposure to HFC–134a in humans has resulted in reactive airway dysfunction syndrome,[30] (Doshsti et al., 2016), severe hypotension, loss of consciousness, shock (Vinegar, 1997), cardiac sensitization, neurotoxicity (National Research Council, 2002), and death (Burke et al et al., 2020).

B. Description of the Hazard Pattern

To examine the hazard pattern for inhalation abuse of aerosol duster products, staff conducted 23 in-depth investigations (IDIs) with family members of individuals who died from inhaling aerosol duster products during 2020 and 2021. These IDIs were all related to HFC–152a abuse and included nine females and 14 males, between the ages of 15 to 61 years-old.

The review of the IDIs indicated the number of canisters found at the scene, the victim's history of abuse, and the scene of the incident. In five IDIs [31] only one empty canister was identified, though in some of these IDIs multiple full cans were found at the scene, and the victim had a history of aerosol duster abuse. In twelve incidents,[32] the IDIs reported that more than one completely or partially empty canister was found at the victim's death scene. In several IDIs,[33] twenty or more canisters of aerosol duster product were found with the victim at the death scene. The majority of the victims died at home, while some were found deceased in motels or in parked vehicles.

Based upon staff's review of 23 IDIs and available medical literature, the hazard pattern for inhalation deaths from HFC–152a aerosol duster products includes both males and females; covers a wide age range; indicates that death can occur from inhalation of a single canister or multiple canisters; and shows that most victims died at home, but deaths also occurred in motels and parked vehicles. As stated above, the hazard pattern for HFC–134a is believed to be similar to the hazard pattern for HFC–152a because both propellants are inhalational anesthetics with similar toxicities at high doses.

C. Incident Data

1. Deaths

This section presents information on fatal incidents reported to CPSC that involved inhalation abuse (commonly known as sniffing, spraying or huffing, but referred to here as inhaling or inhalation) of aerosol duster products. The most recent search of the CPSC databases for incidents involving inhalation abuse of aerosol duster products was conducted in February 2024.

CPSC databases (CPSRMS and the National Electronic Injury Surveillance System (NEISS)) do not contain a specific product code for aerosol duster products. Accordingly, the product codes searched in CPSRMS at that time were 1133 (Aerosol containers), 921 (Chemicals not elsewhere classified), and 954 (General-purpose household cleaners). Aerosol duster products are included as a sub-category of product code 954 but may occasionally be sorted into product codes 1133 and 921. Aerosol duster products were identified in CPSRMS incident narratives or product descriptions as dusters, aerosol dusters, computer/keyboard/electronics dusters or cleaners, canned/compressed air, or by specific brand names, including misspelled variants of the above keywords. This review excluded aerosol duster incidents that were exclusively associated with common non-inhalation hazards from aerosol duster products, such as explosions, fires, chemical burns, or respiratory injuries related to the product's intended use.

CPSC's CPSRMS database contains reports for 1,039 unique fatal incidents involving inhalation hazards from aerosol duster products that occurred between January 1, 2012, and December 31, 2021. Data collection is ongoing in CPSRMS and reporting is considered incomplete for more recent years (2022–2024). The number of deaths associated with aerosol duster products reflected in CPSRMS and classified as involving aerosol duster inhalation is almost certainly an underestimate of the actual number of aerosol duster inhalation deaths.

Almost all of the 1,039 deaths were reported from death certificates and

[25] Lipophilic means the tendency to combine with fats.

[26] If the effect is changing with the dose of the drug it is described as dose dependent.

[27] Psychotic symptoms associated with drug cessation.

[28] Substance that induces insensitivity to pain.

[29] Binding of a substance to a receptor molecule changes its shape or activity to transmit a signal.

[30] Breathing symptoms similar to asthma but with an uncertain cause.

[31] IDI numbers 230406HCC1189, 230815HCC1044, 230822HCC1098, 230906HCC1211, 231005HCC3036.

[32] IDI numbers 23071HCC3850, 230329HCC1057, 230707HCC1701, 230720HCC1777, 230725HCC1827, 230808HCC3987, 230822HCC1099, 230906HCC1208, 230906HCC1209, 230929HCC1377, 230329HCC1048, 230711HCC1721.

[33] IDI numbers 230711HCC3850, 230329HCC1057, 230707HCC1701, 230711HCC1721, 230720HCC1777, 230725HCC1827, 230808HCC3987, 230822HCC1099, 230906HCC1208, 230906HCC1209, 230929HCC1377, 230929HCC1048.

Medical Examiners and Coroners Alert Project (MECAP) reports. Among these 1,039 deaths, 775 (75%) were attributed to HFC–152a toxicity, and three were attributed to HFC–134a toxicity. In the remaining incident reports, the specific aerosol duster propellant is not explicitly identified. For several of the deaths that occurred in 2020 and 2021, staff conducted IDIs to learn more about the details surrounding the fatal incident (*i.e.,* victim's history of using aerosol duster products). This death count only includes incidents where the product involved was explicitly identified as an aerosol duster product.

Deaths from HFC–152a toxicity where the specific product was not identifiable, and deaths resulting from the inhalation of unspecified aerosols, are not included in the figures given above. Although HFC–152a is commonly used as a propellant in aerosol duster products, the compound is also used in other aerosol products, such as pesticides and air fresheners. Between 2012–2021, there were an additional 1,031 deaths reported in CPSRMS resulting from HFC–152a toxicity from an unspecified aerosol product. The age, gender, and race/ethnicity distributions of these deaths are similar to those for the aerosol duster product inhalation deaths discussed in this section. Additionally, between 2012–2021, there were at least 63 deaths found in CPSRMS that mentioned inhalation of aerosol products, without giving sufficient information to determine if the product was an aerosol duster product. Because the scope of the data analyses here only includes incidents explicitly mentioning an aerosol duster product, these deaths are not included among the 1,039 fatal incidents in the analyses discussed above.

CPSC is aware of at least seven deaths resulting from HFC–134a toxicity between 2012 and 2021. In three of these deaths, the product involved was identified as an aerosol duster product, and these three deaths are included in the above aerosol duster products fatality count. The remaining four deaths either did not specify the type of product involved, or they involved an unspecified aerosol product. CPSC has also received reports of deaths involving HFC–134a toxicity that occurred between 2006 and 2010, including some that specifically identified an aerosol duster product being involved.

Table 1 below provides an overview of the distribution of aerosol duster inhalation deaths found in CPSRMS, which, as noted, almost certainly understates the actual number of deaths reported to CPSC from these products. Data in CPSRMS are anecdotal in nature and do not necessarily represent all incidents that have actually occurred. Furthermore, death certificates tend to have a greater lag time between the incident/death date and the date the death was reported to CPSC. Therefore, the counts below are subject to increase, especially for the more recent years.

TABLE 1—AEROSOL DUSTER INHALATION DEATHS BY YEAR

[2012–2021]

Year	Total deaths
2012	54
2013	104
2014	90
2015	124
2016	130
2017	127
2018	124
2019	114
2020	89
2021	83
Total	1,039

Source: CPSRMS.
Percentages may not add to 100% due to rounding.

Table 2 below provides an overview of the distributions of aerosol duster product inhalation deaths by age group and gender. Among the identified deaths, almost 70 percent were male, and 94 percent were between the ages of 18 and 54, with ages ranging between 13 and 70 years old.

TABLE 2—DISTRIBUTION OF AEROSOL DUSTER INHALATION VICTIMS BY AGE GROUP AND GENDER

[2012–2021]

Age group (years)	Male	Female	Total
0–17*	4	8	12 (1%)
18–34	296	159	455 (44%)
35–54	376	143	519 (50%)
55 or older	40	12	52 (5%)
Unspecified	1	0	1 (<1%)
Total	717 (69%)	322 (31%)	1,039

Source: CPSRMS.
Percentages may not add to 100% due to rounding.

Race information was reported in 881 (85%) of the 1,039 deaths. Table 3 provides an overview of the distribution of aerosol duster inhalation deaths by race where the data were available. Over 92 percent of the victims were white.

TABLE 3—DISTRIBUTION OF AEROSOL DUSTER INHALATION DEATHS BY RACE

[2012–2021]

Race	Total	Percent
White	814	92
Black/African-American	24	3
American Indian/Alaska Native	17	2
Other*	26	3
Total	881	100

Source: CPSRMS.
* Includes Asian, Native Hawaiian/Pacific Islander and Other race categories.

Ethnicity data for aerosol duster inhalation deaths between 2012 and 2021 are also incomplete. The ethnicity is known for 769 (74%) of the 1,039 deaths. Among the 769 deaths with known ethnicity, 56 (7%) were identified as Hispanic, while 713 (93%) were identified as non-Hispanic.

Table 4 below provides an overview of the distribution of aerosol duster inhalation deaths found in CPSRMS by the incident location of the death. Location information was specified for 891 (88%) of the 1,039 deaths. Most of the deaths (78%) occurred in a housing unit, apartment, or condominium.

TABLE 4—DISTRIBUTION OF AEROSOL DUSTER INHALATION DEATHS

by Incident Location [2012–2021]

Location	Total	Percent
Home/Apartment/Condominium *	711	78
Other Public Property/Office	128	14
Street/Highway	8	1
Place of Recreation or Sports	5	1
Other **	63	7
Total	915	100

Source: CPSRMS.
Percentages may not add to 100% due to rounding.
* Includes mobile and manufactured homes.
** Includes a school, industrial location or any other location.

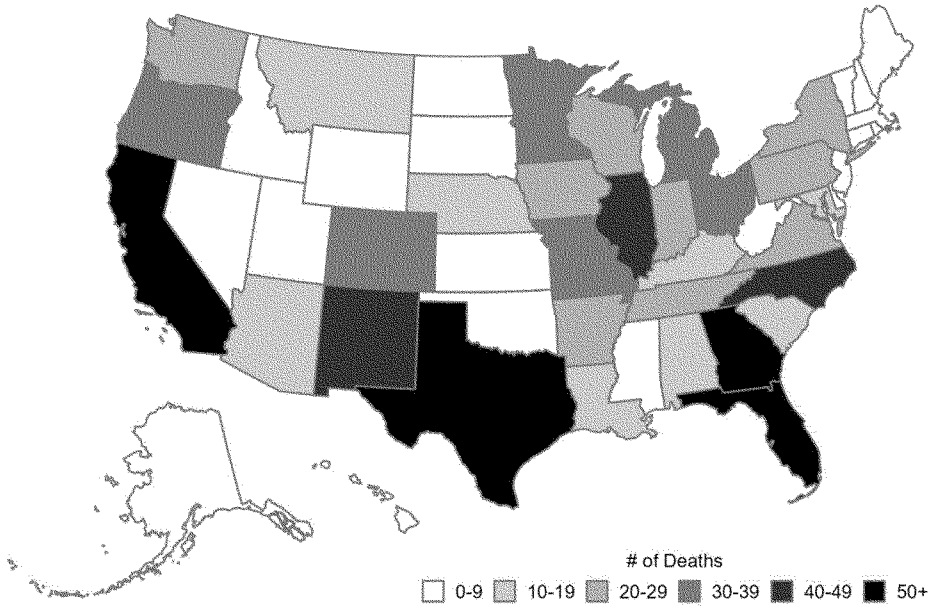
Table 5 and Figure 3 provide an overview of the distribution of aerosol duster product inhalation deaths in CPSRMS by U.S. state. The states with the most reported aerosol duster inhalation deaths are Florida (83), Texas (67), California (67), Georgia (58) and North Carolina (47). Over 30 percent of all aerosol duster inhalation deaths reported to CPSC occurred in these five states.

TABLE 5—NUMBER OF REPORTED FATAL DUSTER INCIDENTS BY STATE

[2012–2021]

State	Deaths	State	Deaths
Florida	83	Arizona	11
California	67	Nebraska	11
Texas	67	Maryland	10
Georgia	58	Montana	10
North Carolina	47	Massachusetts	9
Illinois	46	South Dakota	9
New Mexico	40	Nevada	8
Oregon	37	Oklahoma	8
Minnesota	36	Kansas	7
Colorado	35	Delaware	6
Missouri	33	Mississippi	6
Michigan	30	North Dakota	6
Ohio	30	Wyoming	6
Arkansas	29	Alaska	5
Pennsylvania	28	New Jersey	5
Tennessee	28	Idaho	4
Virginia	28	Maine	4
Indiana	27	New Hampshire	4
New York	25	Connecticut	3
Iowa	21	Hawaii	3
Washington	20	Rhode Island	3
Wisconsin	20	Vermont	3
Louisiana	18	Utah	2
South Carolina	17	West Virginia	*0
Alabama	13	D.C.	*0
Kentucky	13	Total	1,039

Source: CPSRMS.
* CPSC did not receive any reports related to deaths due to aerosol duster inhalation from West Virginia or the District of Columbia that occurred between 2012 and 2021.



Source: CPSRMS.
CPSC did not receive any reports related to deaths due to aerosol duster inhalation from West Virginia or the District of Columbia that occurred between 2012 and 2021.

Figure 3: Number of Reported Fatal Duster Incidents by State (2012-2021)

2. Injury Estimates

This section presents information on emergency department treated injuries resulting from inhalation abuse of aerosol duster products. The estimates are derived from injury cases that were recorded in CPSC's NEISS database,[34] and the injuries were treated during the 10-year period between January 1, 2012, and December 31, 2021. Between 2012–2021, it is estimated that there were 21,700 ED-treated injuries in the United States resulting from inhalation of aerosol duster products. This estimate is based on a sample of 491 NEISS-reported injury cases, three of which were deaths. These three deaths are included among the 1,039 deaths from CPSRMS that are discussed above.

Injury incident cases were included in the sample only if the product being used could reasonably be classified as an aerosol duster product. While CPSRMS incidents typically report product identifying characteristics (*i.e.,* manufacturer, brand, model, retailer, product description), NEISS injury narratives rarely provide such detailed information on the products involved. Thus, NEISS data are likely an underestimate of the true number of ED-treated injuries, as more generic product classifications (*i.e.,* cleaning product, household cleaner, etc.) may be used to describe aerosol duster products. An additional 2,500 estimated ED-treated injuries resulted from ''huffing'' unspecified products, or inhalation of products described as ''aerosol cans,'' ''aerosol cleaners,'' or simply ''aerosols,'' but these injuries are excluded from this analysis because of the non-specificity of the product description and the lack of information on the propellant being inhaled. Other types of injuries not involving aerosol duster inhalation, such as respiratory injuries from the product being sprayed, are not included in the above estimates.

Table 6 below presents yearly estimates of ED-treated injuries in the United States from inhaling aerosol duster products. Between 2012–2021, there is no evidence of a statistically significant linear trend in ED-treated injuries due to aerosol duster inhalation (p-value >0.05).

TABLE 6—NEISS ESTIMATES FOR AEROSOL DUSTER INHALATION INJURIES BY YEAR
[2012–2021]

Year	Estimate[35]	Sample size	CV
2012	**	23	.28
2013	2,000	46	.22
2014	1,500	35	.28
2015	2,500	45	.26
2016	3,000	66	.28

[34] More information about the NEISS sample and estimate calculation can be found here: Explanation Of NEISS Estimates Obtained Through The CPSC website | *CPSC.gov.*

TABLE 6—NEISS ESTIMATES FOR AEROSOL DUSTER INHALATION INJURIES BY YEAR—Continued

[2012–2021]

Year	Estimate [35]	Sample size	CV
2017	2,700	67	.22
2018	2,100	53	.21
2019	2,000	50	.30
2020	**	56	.38
2021	2,000	50	.27
2012–2021	21,700	491	.18

Source: NEISS.
Estimates rounded to nearest 100; estimates that failed to meet NEISS publication criteria are presented as **.
Rows may not add to total due to rounding.

Table 7 below depicts a breakdown of the disposition of the injured patients. A large majority (70%) of the estimated injuries were categorized as ''treated and released'' or ''examined and released without treatment,'' while around 20 percent involved more serious injuries requiring hospitalization or additional observation.

TABLE 7—NEISS ESTIMATES FOR AEROSOL DUSTER INHALATION INJURIES BY DISPOSITION

Disposition	Estimate	Sample size
Treated and released, or Examined and released without treatment	15,200 (70%)	341
Treated and admitted for hospitalization, or Held for observation	4,400 (20%)	103
Left without being seen, or Left without treatment	1,900 (9%)	44
Death *	** (<1%)	3
All Severities	21,700	491

Source: NEISS.* Fatal injury cases in NEISS are also included in CPSRMS data and are thus included in the overall death count.
Estimates rounded to nearest 100; estimates that failed to meet NEISS publication criteria are presented as **.
Rows may not add to total due to rounding.

Table 8 below depicts an overview of the injuries based on age and gender. Around two-thirds of the estimated injuries occurred in males, and around 91 percent of estimated injuries occurred in patients between ages 18 and 54.

TABLE 8—NEISS ESTIMATES FOR AEROSOL DUSTER INHALATION INJURIES BY AGE & GENDER

Age group (years)	Male	Female	Total
0–17	**	**	1,500 (7%)
18–34	6,800	3,300	10,100 (47%)
35–54	6,200	3,400	9,600 (44%)
55 or older	**	**	** (2%)
Total	14,300 (65%)	7,500 (35%)	21,700 (100%)

Source: NEISS.
Estimates rounded to nearest 100; estimates that failed to meet NEISS publication criteria are presented as **.
Estimates and percents may not add to the total due to rounding.

Race and ethnicity data are largely incomplete for aerosol duster product inhalation injury cases between 2012–2021. Race is unknown for around 37 percent of the 21,700 ED-treated injuries during the 10-year period. Among the 13,700 injuries where race is known, white individuals constituted around 83 percent of injuries; Black individuals constituted 6 percent of injuries; and other races constituted the remaining 11 percent. Ethnicity data was added to the NEISS database starting in mid-2018. As such, ethnicity is unknown for the majority (79%) of injuries reported during the period reviewed. Among the 4,500 injuries with known ethnicity, Hispanic individuals constituted 37 percent of injuries, while non-Hispanic individuals constituted the remaining 63 percent.

Approximately 5,700 of the estimated 21,700 ED-treated injuries (26%) occurred at home. Another 6,300 estimated injuries (29%) took place on public property, and 2,200 estimated injuries (10%) took place on a street or highway, at a school, or at a place of recreation. The location for the remaining 7,600 estimated injuries (35%) was either unknown or not recorded.

[35] According to the NEISS publication criteria, an estimate can only be presented if it is 1,200 or greater, is derived from a sample size of at least 20 injury cases and has a coefficient of variation (CV) no greater than 33 percent. As such, estimates that do not meet all three of the above criteria are not presented in any table. CV is calculated by dividing an estimate's standard deviation by the estimate itself.

Approximately 18,700 of the estimated 21,700 ED-treated injuries (86%) were diagnosed primarily as poisonings, while the remaining 3,000 estimated injuries were diagnosed mostly as burns (chemical, thermal or unspecified), anoxia, contusions/abrasions, lacerations, or internal organ injuries. Approximately 18,900 of the estimated 21,700 ED-treated injuries (87%) were considered ''whole body'' injuries (*i.e.,* no specific individual body part injured as a result of inhalation). Another 1,700 estimated injuries (8%) were classified as head, face, or mouth injuries, while the remaining 5 percent of injuries were mostly classified as hand, lower arm, or upper trunk injuries.

D. Availability of Incident Data

Upon publication of the NPR in the **Federal Register**, CPSC will make available for review and comment, to the extent allowed by law, the CPSRMS and NEISS incident reports relied upon and discussed in the NPR, along with the associated IDIs. The data can be obtained by submitting a request to: *https://forms.office.com/g/NK9WAGMhAi.* You will then receive a website link to access the data at the email address you provided. If you do not receive a link within 72 hours, please contact: *cscorpio@cpsc.gov.*

V. Absence of Relevant Voluntary Standard

Two existing voluntary standards, ASTM D3061–97, *Standard Guide for Three-Piece Steel and Tinplate Straight-Wall and Necked-In Aerosol Cans,* and DIN EN 15008:2017, *Aerosol Containers—Aluminum Containers—Dimensions of One-Piece Cans with 25.4 mm Aperture,* apply to aerosol duster products. Both standards provide a list of currently manufactured aerosol canister sizes as well as industry voluntary dimensional guidelines, but neither standard addresses the hazard of intentional inhalant abuse.

On February 27, 2023, ASTM Committee F15 hosted an exploratory meeting discussing potential solutions that would prevent intentional inhalation and abuse of aerosol duster products such as including bitterants, warning labels, and use of alternative propellants and alternative technologies. On March 4, 2024, ASTM Committee F15 hosted a second exploratory meeting to discuss developing a possible future voluntary standard and forming a task group for the prevention of intentional inhalation and abuse of aerosol duster products. To date no such task group has been formed.

VI. Justification for the Proposed Ban

The FHSA defines a hazardous substance to include a substance that is ''toxic.'' 15 U.S.C. 1261(f)(1)(A)(i). A substance is toxic if it ''has the capacity to produce personal injury or illness to man through ingestion, inhalation, or absorption through any body surface.'' 15 U.S.C. 1261(g). As discussed in section IV, staff has identified HFC–152a and HFC–134a as two toxic hydrofluorocarbons used as propellants in aerosol duster products. Both hydrofluorocarbons are intentionally inhaled by individuals to experience a euphoric high, resulting in numerous deaths and injuries. Severe HFC–152a toxicity can cause a depressed mental state, respiratory depression, pulmonary edema, hepatic injury, and death (Poisindex, 2021). Symptoms of acute HFC–134a toxicity include severe hypotension, loss of consciousness, shock (Vinegar, 1997), cardiac sensitization, neurotoxicity (National Research Council, 2002), and death (Burke et al., 2020).

Staff researched published medical literature for papers regarding the toxicity of HFC–152a and HFC–134a. While medical literature demonstrates toxicity of the two substances, staff was unable to identify any relevant human data regarding HFC–152a and HFC–134a that would allow for the calculation of a non-toxic human dose. However, that research did provide staff with data to be able to calculate a no observed adverse effect level [36] (NOAEL) in animals for HFC–152a. In toxicology, it is customary to convert animal data to human data in the absence of human data. The Food and Drug Administration (FDA), for example, uses this approach to determine the safe dose of a drug when studying it for the first time in human clinical trials. Based on the generally accepted approach used by FDA, staff converted the NOAEL found in the medical literature to calculate a human equivalent dose (HED) using appropriate scaling factors.[37] Staff used the resulting HED it developed to determine the safe level for the proposed ban after applying a safety factor of 10.[38] Below is a description of the staff approach used in developing the level for the proposed ban on HFC–152a and HFC–134a.

A study was conducted on groups of three rats to mimic the exposure of humans while inhaling HFC–152a (Avella et al., 2010). The rats were exposed to 30 seconds (s) of 20 L/min HFC–152a in an inhalation chamber. During that exposure, all the rats showed signs of intoxication manifested by sedation which began at about 20 s and rapidly progressed to more profound intoxication. At the end of the exposure periods the rats were prostrate and could not get up. The rats remained visibly intoxicated until about four minutes post exposure. Recovery was rapid, and at about eight minutes post exposure, the rats showed no signs of obvious intoxication. Staff calculated a non-toxic human dose of 0.476 mg/kg using the information in the Avella et al., 2010 paper and applying an additional safety factor of 10 for a total safety factor of 100 (see footnote 38 for explanation regarding safety factors). The resulting calculation for a non-toxic human dose is equivalent to 18 mg for 38 kg human (5th percentile weight for 13-year-old female).[39]

Although there are no relevant human inhalation toxicology studies available regarding HFC–134a, the injury and death evidence and properties of HFC–134a discussed above demonstrate a similar hazard to that presented by HFC–152a. HFC–134a has somewhat lower inhalational toxicity in rats compared to HFC–152a (Rusch, 2018). Therefore, the non-toxic dose calculated for HFC–152a will be also protective for HFC–134a.

Based on the assessment that individuals who inhale aerosol duster products inhale a single spray at a time, but may use multiple sprays within a single period of use, and applying the conversion process described above, staff concluded that a single canister of aerosol duster product should be limited to 18 mg or less of HFC–152a and/or HFC–134a to render it non-toxic to humans. Although 18 mg of HFC–

[36] A NOAEL is the highest dose level that does not produce a significant increase in adverse effects in comparison to the control group. The NOAEL is a generally accepted benchmark for safety when derived from appropriate animal studies.

[37] Scaling factors account for differences in size between animals and humans. *See* FDA, 2005, Guidance for Industry Estimating the Maximum Safe Starting Dose in Initial Clinical Trials for Therapeutics in Adult Healthy Volunteers (FDA Guidance), available at: *www.fda.gov/regulatory-information/search-fda-guidance-documents/estimating-maximum-safe-starting-dose-initial-clinical-trials-therapeutics-adult-healthy-volunteers.*

[38] A safety factor allows for variability in extrapolating from animal toxicity studies in humans resulting from: (1) different sensitivity of drugs to animals and humans; (2) differing receptor affinity to drugs between animals and humans; (3) unexpected toxicities; and (4) interspecies differences between the metabolism and time course effect of drugs between animals and humans. Ten is a default value for a safety factor. An additional safety factor of 10 could be used to protect sensitive populations.

[39] This dose will be at least as protective for older females and males of the same age and older due to their higher weight. Anthropometric reference data for children and adults: United States, 2015–2018; *https://stacks.cdc.gov/view/cdc/100478.*

152a or HFC–134a is too small an amount to effectively be used as a propellant in an aerosol duster product, because this amount of propellant is not harmful, the Commission is proposing to allow trace amounts of 18 mg or less of HFC–152a and/or HFC–134a in aerosol duster products to allow for low level contamination that may occur during the manufacturing process. For example, if a manufacturer made a propellant change from the manufacture of an unregulated product to a regulated aerosol duster product, leftover contaminant levels remaining in hose lines used to fill aerosol duster products during manufacturing would not result in violative products as long as there is 18 mg or less per canister of the banned propellants. Therefore, the Commission preliminarily finds that any aerosol duster product containing more than 18 mg in any combination of HFC–152a and/or HFC–134a is toxic, and thus, is a hazardous substance under the FHSA.

Under the FHSA, the Commission may classify a hazardous substance that is packaged in a form suitable for use in the household as a ''banned hazardous substance'' if the Commission finds that ''notwithstanding such cautionary labeling as is or may be required under this chapter for that substance, the degree or nature of the hazard involved in the presence or use of such substance in households is such that the objective of the protection of the public health and safety can be adequately served only by keeping such substance, when so intended or packaged, out of the channels of interstate commerce.'' 15 U.S.C. 1261(q)(1)(B). The Commission preliminary makes such a finding for HFC–152a and HFC–134a used in aerosol duster products.

Aerosol duster products are sold to consumers for use in their homes, and almost all aerosol duster products currently on the market display cautionary labeling including at a minimum a signal word (POISON, DANGER, WARNING, CAUTION) and statement(s) of principal hazard(s) such as FLAMMABLE and VAPOR HARMFUL as required by the FHSA and 16 CFR 1500.121. Aerosol duster products on the market also contain statements to inform consumers of intentional misuse, inhalation abuse, and the potential consequences of either activity. Tab C in the July 20, 2022, staff briefing package contains an in-depth analysis regarding the labeling of aerosol duster products.[40]

Although current aerosol duster products on the market contain both FHSA-required labeling, as well as statements identifying the potential hazard of aerosol duster abuse and misuse, these labels have not prevented the more than 1,000 deaths described in section IV of the preamble. The Commission therefore preliminary finds that labeling of aerosol duster products does not effectively address the inhalation hazard presented by aerosol duster products. Because large numbers of deaths and injuries continue to occur despite the cautionary labeling on aerosol duster products, the Commission is proposing to ban the use of toxic propellants HFC–152a and HFC–134a in any aerosol duster canister in amounts above 18 mg.

VII. Description of the Proposed Rule

The proposed rule would amend 16 CFR part 1500 to add a new provision under 16 CFR 1500.17 declaring any canister of aerosol duster product containing more than 18 mg in any combination of HFC–152a and/or HFC–134a to be a banned hazardous substance under the FHSA. The provisions of the proposed ban are described below.

A. Proposed § 1500.17(a)(14)(i)—Ban on Aerosol Duster Products Containing More Than 18 mg in Any Combination of HFC–152a and/or HFC–134a

The proposed rule would add a new paragraph, § 1500.17(a)(14)(i) to 16 CFR 1500.17, that would declare any canister of aerosol duster product containing more than 18 mg in any combination of 1,1-difluoroethane (HFC–152a, CAS #75–37–6) and/or 1,1,1,2-tetrafluoroethane (HFC–134a, CAS #811–97–2) to be a banned hazardous substance under section 2(q)(1) of the FHSA. Section VI of the preamble provides the technical justification for the proposed ban. Proposed § 1500.17(a)(14)(i) also defines ''aerosol duster product'' to mean a product that uses a pressurized canister filled with gas or liquified gas to create a stream of gas propellant that can be used to dislodge or remove dust and debris.

B. Proposed § 1500.17(a)(14)(ii)—Prohibited Stockpiling

Pursuant to section 9(g)(2) of the CPSA, 15 U.S.C. 2058(g)(2), § 1500.17(a)(14)(ii) of the proposed rule would prohibit a manufacturer from ''stockpiling'' or substantially increasing the manufacture or importation of noncompliant aerosol duster products between the date of publication of the final rule and the effective date. Section 9(g)(2) defines stockpiling to mean manufacturing or importing a product between the date of promulgation of a rule, regulation, standard, or ban and its effective date at a rate which is significantly greater than the rate at which such product was produced or imported during a base period ending before the date of promulgation of the rule standard, or ban. The proposed stockpiling provision for hazardous aerosol dusters, which is explained more fully in Tab A of the staff NPR briefing package [41], would prohibit the manufacture or importation of noncompliant aerosol duster products in any one-month period between the date of publication of the final rule and the effective date of the final rule at a rate greater than 105 percent of the rate at which they were manufactured or imported during the base period for the manufacturer or importer. The base period for aerosol duster products is defined in the proposed rule as the average monthly manufacture or import volume for the last 13 months immediately preceding the month of the publication of the final rule.

C. Proposed § 1500.17(a)(14)(iii)—Findings

Proposed § 1500.17(a)(14)(iii) describes the Commission's preliminary findings required under sections 2(q)(1) and 3(h) of the FHSA, including requirements regarding voluntary standards, relationship of benefits to costs, and the least burdensome requirement.

VIII. Preliminary Regulatory Analysis

Pursuant to section 3(h) of the FHSA, publication of a proposed rule must include a preliminary regulatory analysis containing:

- a preliminary description of the potential benefits and potential costs of the proposed rule, including any benefits or costs that cannot be quantified in monetary terms, and an identification of those likely to receive the benefits and bear the costs;
- a discussion of why a relevant voluntary safety standard would not eliminate or adequately reduce the risk of injury addressed by the proposed rule;
- a discussion of the reasons for the Commission's preliminary determination of why the voluntary standards process would not within a reasonable time result in the development of a voluntary standard that would eliminate or adequately

[40] *www.cpsc.gov/s3fs-public/Petition-Requesting-Rulemaking-to-Establish-Safety-Standard_0.pdf?VersionId=GNEl7pYZUBOxf1BLSC0f4.X6TlA8gT4f.*

[41] *https://cpsc.gov/s3fs-public/Briefing-Package-Draft-Proposed-Rule-Aerosol-Duster-Products.pdf?VersionId=m8a.WZmo3DJvX0U3qR.EbOr4yQU9yeps.*

reduce the risk of injury identified in the rule; and

- a description of any reasonable alternatives to the proposed rule, together with a summary description of their potential costs and benefits and why such alternatives should not be published as a proposed rule.

15 U.S.C. 1262(h).

Below is a summary of the preliminary regulatory analysis for the proposed rule. See Tab A of the staff NPR briefing package [42] for the complete preliminary regulatory analysis.

A. Market Information

1. The Product

Aerosol duster products, also known as canned air, are pressurized canisters filled with liquified gas propellant. They utilize the force of compressed gas, released through a nozzle or straw attachment, to create a direct stream of gas that dislodges and blows away debris. Many aerosol duster products are labeled for ''electronics dusting,'' or more generically, as a ''multi-purpose duster.'' These products are marketed for dusting laptops, keyboards, computers, TVs, phones, printers, electronic toys, gaming devices, and other common household products including sewing machines, clocks, watches, musical instruments, and for auto detailing.

Other alternative products that would not be subject to the proposed ban exist for consumers to use for similar dusting purposes, including aerosol duster products using the propellant HFO–1234ze, compressed air dusters which use corded or cordless electric pumps, or even hand pumps, to compress air and blow it through a nozzle, CO_2 cartridge dusters which use disposable CO_2 cartridges to blow CO_2 through a nozzle, as well as vacuum cleaners.

While prices for aerosol duster products vary widely, the average price for a canister of aerosol duster is $8.00 according to a Maia Research market report [43] and $10.19 according to the Aerosol Duster Market Report available on the CPSC website.[44] Aerosol duster products that use HFC–152a as a propellant are most common due to this propellant being less expensive than the less common alternative propellants HFC–134a or HFO–1234ze (*trans*-1,3,3,3-tetrafluoropropene). HFC–134a is non-flammable but is considered a potential greenhouse gas. HFO–1234ze was introduced as an environmentally friendly alternative to HFC–134a, with low global warming potential. (See the staff's preliminary regulatory analysis in Tab A of the staff NPR briefing package for a more complete discussion of aerosol duster products and a complete list of references.)

2. Market Trends for Aerosol Duster Products

Firms that sell aerosol duster products typically engage in either contract manufacturing or are private labelers. Typically, a company that engages in contract manufacturing has another company produce their product for them but remain involved in all components of manufacturing by providing specifications. When a company engages in contract manufacturing, the firm owns the end products for which they have contracted out production. Similarly, private labelers have their production manufactured by a third party; however, the product is owned by that third party and can be sold to other companies, as well. Typically, a private labeler owns a brand name and buys products from the third party to sell it under their established brand. While slightly different in structure, both of these arrangements (contract manufacturing and private labeling) allow firms that produce aerosol duster products to benefit from flexibility in their production processes, and typically avoid large, fixed manufacturing costs to produce their products.

3. Future Market Size for Aerosol Duster Products

Staff forecast aerosol duster products sales for a 30-year study period (2026–2055) using data from a market research report by MAIA Research. In this forecast, staff estimates the number of units of aerosol duster products sold in 2026 will be 18.31 million, absent the regulation of the product described in the proposed rule. In the scenario without the proposed rule, staff estimates the number of units sold in 2055 will be 35.81 million. This estimate is based on a continuation of historical sales growth for the product, which could be affected by a number of unknown factors such as reduced use of computer keyboards or revised environmental regulations.

B. Preliminary Description of Potential Benefits and Costs of the Proposed Rule

Staff conducted a benefits analysis of the proposed rule. The benefits analysis accounted for mitigated deaths and injuries from the proposed rule, which staff monetized using the value of statistical life (VSL) for deaths and the Injury Cost Model (ICM) for injuries. As discussed above, this is likely an undercount of benefits, because staff's count of deaths was limited to cases where the product was explicitly identified as an aerosol duster product. Over a 30-year study period, staff estimated the total annualized net benefits (benefits less costs) from the proposed rule, discounted at 2 percent, to be $1.93 billion due to reduced fatalities and injuries from inhalation. Stated differently, every dollar of cost from the proposed rule is estimated to produce $16.59 of benefits.

The proposed rule would impose three main costs: (1) markup losses to manufacturers/importers of aerosol duster products; (2) increased prices paid by consumers; and (3) deadweight losses or market impacts caused by the increased price associated with compliance with the regulation and the subsequent decline in demand. As detailed in Tab A of the staff NPR briefing package, staff estimates that these costs total $123.73 million over the 30-year study period, discounted at 2 percent.

When the estimated benefits of $2.05 billion are compared to the estimated costs of $123.73 million, the estimated benefits of the rule are far greater than the estimated costs. Staff calculates net benefits (benefits less costs) to be $1.93 billion on an annualized basis, after discounting at 2 percent. However, staff notes that one of the unquantified costs of the proposed rule is the assumed creation of a black market for noncompliant aerosol duster products. Due to the euphoric high experienced with HFC–152a and HFC–134a, consumers who use aerosol duster products as inhalants may still want to purchase noncompliant canisters. This inelastic demand and significant reduction in supply of noncompliant canisters due to the proposed rule would create an incentive for individuals to supply those individuals with noncompliant canisters, such as those that are illegally imported from other countries. The creation of a black market can create significant negative externalities such as increased illicit activity, increased crime and subsequently increased spending on law enforcement, and greater health and safety risks to consumers. Staff cannot estimate the magnitude of these externalities with any certainty. In addition, this analysis does not consider individuals who may stop inhaling aerosol duster products after the rule goes into effect but start using other

[42] *https://cpsc.gov/s3fs-public/Briefing-Package-Draft-Proposed-Rule-Aerosol-Duster-Products.pdf?VersionId=m8a.WZmo3DJvX0U3qR.EbOr4yQU9yeps.*

[43] Maia Research (January 2024). United States Air Duster Industry Market Research Report. 2025 price estimate, deflated to 2023 dollars using CPI.

[44] *www.cpsc.gov/content/Aerosol-Duster-Study-Final-Report.*

intoxicants in its place. If staff were able to forecast and quantify this effect, the impact could reduce the estimated benefits from the proposed rule. However, given the net estimated benefits of $1.93 billion per year in staff's analysis, the benefits of the proposed rule would likely still outweigh the costs even if these externalities occur.

To investigate the impact of using alternative values for some of the key inputs and assumptions of the analysis, staff conducted a sensitivity analysis to compare with the main preliminary regulatory analysis. In the main preliminary regulatory analysis, staff assumes a large number of individuals would continue to use most aerosol duster products obtained on the black market as inhalants due to the euphoric high experienced with HFC–152a and HFC–134a.

In the sensitivity analysis, staff considered an alternative scenario. The sensitivity analysis assumes that the prohibition of HFC–152a and HFC–134a in aerosol duster products results in a greater reduction in inhalant abuse. Staff estimated that, currently, 7.88 percent of aerosol duster products are potentially used by consumers as inhalants. After the regulation goes into effect, staff estimated that there would be an overall reduction in products used as inhalants, but the share of products used as inhalants increases to about 30 percent. In the sensitivity analysis, staff assumes that the share of products used as inhalants is unchanged at 7.88 percent. This change in input inherently assumes that the proposed rule would be more effective at changing the behavior of consumers who use aerosol duster products as inhalants.

This change in assumption increases benefits without affecting the costs. In this scenario, net benefits increase to $2.94 billion when annualized at 2 percent, which boosts the benefit-cost ratio from $16.59 of benefits for every $1 of cost shown in the main preliminary regulatory analysis, to $24.78 of benefit for every $1 of cost show in the sensitivity analysis.

C. Evaluation of Voluntary Standards

Based on the current state of the voluntary standard's process for aerosol duster products discussed in section V of the preamble, the Commission determines that no current U.S. voluntary standard exists to address the inhalation hazard posed by aerosol duster products. Further, there is no indication that any voluntary standards organization has a clear plan to address the inhalant hazard in a new or existing voluntary standard. Therefore, the Commission preliminarily determines at this time that the voluntary standard's process will not within a reasonable time result in the development of a voluntary standard that would eliminate or adequately reduce the risk of injury identified in the proposed rule. No standard or portion of a standard has been submitted to the Commission under sections 3(f)(5) and (6) of the FHSA.

D. Alternatives to the Proposed Rule

The Commission considered four alternatives to the proposed rule: (1) performance requirements; (2) aversive agents (bitterants); (3) labeling; and (4) take no regulatory action and rely upon the voluntary standard's process. The Commission finds that none of these alternatives would adequately address the inhalation hazard associated with aerosol duster products.

1. Performance Requirements

Rather than banning hazardous aerosol duster products under the FHSA, the Commission could in principle mandate a performance requirement under sections 7 and 9 of the CPSA, 15 U.S.C. 2056, 2058, aimed at making aerosol duster products using the propellants HFC–152a and HFC–134a less likely to be used for inhalation. This alternative assumes that an effective performance standard for preventing aerosol duster abuse could be developed. To date, however, suppliers have been unable to develop a performance standard that would effectively prevent the inhalation abuse of aerosol duster products while still allowing for use of the product as intended. Staff is unaware of any existing voluntary standard to address the inhalation hazard. In March 2024, ASTM considered establishing a task group to develop a standard, but no task group was formed. Incident data indicates that victims of injury and death are primarily adults who purchase aerosol duster products with the intended goal of intentionally inhaling the product. Even assuming a performance requirement could be developed, while such a requirement may be effective in preventing young children from releasing the contents of aerosol duster products by adding child-safe features, it would not be effective in preventing adults from abusing and inhaling aerosol duster products, and notably the overwhelming number of injuries and deaths occur among adults. Thus, it would be very difficult, if not impossible, to develop a performance standard that would be effective in addressing inhalant abuse of aerosol duster products. Therefore, the Commission finds this alternative would not address the unreasonable risk of injury associated with aerosol duster products.

2. Aversive Agents (Bitterants)

As FUAIA recommended in its 2021 rulemaking petition, the Commission could adopt a CPSA performance standard to require aversive agents (bitterants) to be used in aerosol duster products. At the petition stage, staff evaluated the use of aversive agents such as bitterants in aerosol duster products and concluded that adding bitterants would not be effective at addressing the inhalant hazard posed by aerosol duster products. Tab B in the July 20, 2022 staff briefing package contains an in-depth analysis regarding the use of bitterants in aerosol duster products.[45] Additionally, many aerosol duster products currently on the market contain bitterants,[46] which appears not to have led to a decline in deaths and injuries associated with inhalant abuse of aerosol duster products. Therefore, the Commission finds this alternative would not adequately address the unreasonable risk of injury associated with aerosol duster products.

3. Labeling

The Commission could require warning and other labels on aerosol duster products. However, most aerosol duster products currently on the market are labeled regarding the inhalation hazard, which appears to have had little impact on deaths and injuries associated with inhalant abuse of aerosol duster products. Additionally, at the petition stage, staff concluded that labeling of aerosol duster products is unlikely to be effective at addressing the inhalation hazard posed by aerosol duster products. In fact, labeling could have the perverse consequence of causing people inclined to abuse inhalants to seek out products with the enhanced warning on the label, thereby facilitating the problem that the label was intended to avoid. Therefore, the Commission finds this alternative would not adequately address the unreasonable risk of injury associated with aerosol duster products.

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[45] *www.cpsc.gov/s3fs-public/Petition-Requesting-Rulemaking-to-Establish-Safety-Standard_0.pdf?VersionId=GNEl7pYZUBOxf1BLSC0f4.X6TlA8gT4f.*

[46] According to the Aerosol Duster Study completed by Euromonitor International in July 2023, approximately 70 percent of all aerosol duster sales are of bitterant-containing products. (*https://www.cpsc.gov/s3fs-public/Aerosol-Duster-Study-2023-Redacted.pdf?VersionId=idRW1RnIfr_5Jkc9sA9mkss8kTyUmZDD*).

4. Take No Regulatory Action and Rely Upon the Voluntary Standard's Process

The Commission could take no regulatory action and rely upon the voluntary standard's process to address the inhalation hazard posed by aerosol duster products. Currently, however, no U.S. voluntary standard exists or is under consideration to address the inhalation hazard posed by aerosol duster products. Therefore, as discussed in section V of this preamble, the Commission finds this alternative would not adequately address the unreasonable risk of injury associated with aerosol duster products.

IX. Initial Regulatory Flexibility Analysis

Whenever an agency publishes an NPR, section 603 of the Regulatory Flexibility Act (RFA), 5 U.S.C. 601–612, requires the agency to prepare an initial regulatory flexibility analysis (IRFA), unless the head of the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. The IRFA, or a summary of it, must be published in the **Federal Register** with the proposed rule. Under section 603(b) of the RFA, each IRFA must address:

(1) a description of why action by the agency is being considered;

(2) a succinct statement of the objectives of, and legal basis for, the proposed rule;

(3) a description of and, where feasible, an estimate of the number of small entities to which the proposed rule will apply;

(4) a description of the projected reporting, recordkeeping, and other compliance requirements of the proposed rule, including an estimate of the classes of small entities which will be subject to the requirement and the type of professional skills necessary for preparation of the report or record; and

(5) an identification, to the extent practicable, of all relevant Federal rules which may duplicate, overlap, or conflict with the proposed rule.

The IRFA must also describe any significant alternatives to the proposed rule that would accomplish the stated objectives and that minimize any significant economic impact on small entities.

A. Reason for Agency Action

The intent of the proposed rulemaking is to reduce deaths and injuries associated with inhalant abuse of aerosol duster products. The Commission is considering the action because of the numerous deaths and injuries associated with the use of aerosol duster products.

B. Objectives of and Legal Basis for the Rule

The Commission proposes this rule to reduce death and injury associated with inhalant abuse from aerosol duster products. This standard is promulgated under the authority of the FHSA. To declare a substance a banned hazardous substance under section 2(q)(1) of the FHSA the Commission must follow the procedural requirements set forth in section 3(f)–(i) of the FHSA. *See* 15 U.S.C. 1261(q)(2) and 1262(f)–(i).

C. Small Entities To Which the Rule Will Apply

The proposed rule would apply to all manufacturers and importers of aerosol duster products. According to estimates by Euromonitor International (Euromonitor), the household consumer market for aerosol duster products was $99.7 million in 2022, and approximately 87 percent of aerosol duster products examined use the propellant HFC–152a and 11 percent use HFC–134a. The remainder use a mixture of these two propellants or an alternative propellant.

According to information collected by staff, in 2024 there were an estimated 31 firms that supply the domestic market for aerosol duster products. Among these firms, 26 are manufacturers and five are importers/wholesalers. Approximately 90 percent of suppliers (28 suppliers) are located domestically in the United States.

D. Compliance, Reporting, and Record-Keeping Requirements of Proposed Rule

In accordance with section 14 of the CPSA, 15 U.S.C. 2063, manufacturers would have to issue a General Certificate of Conformity (GCC) for each aerosol duster product model, certifying that the model complies with the proposed ban. Each GCC must also be based on a test of each product or a reasonable testing program and provided to all distributors or retailers of the product. The manufacturer would have to comply with 16 CFR part 1110 concerning the content of the GCC, retention of the associated records, and any other applicable requirements.

E. Federal Rules That May Duplicate, Overlap, or Conflict With the Proposed Rule

CPSC currently has no regulations regarding the use of HFC–152a and/or HFC–134a in aerosol duster products or any other consumer product. However, the U.S. EPA regulates, or is in the process of regulating, the use of HFC–152a and HFC–134a as hydrofluorocarbons for various uses, including for use in motor vehicle air conditioning, as refrigerants for use in self-chilling cans for household refrigeration, transport refrigeration, vending machines, cold storage warehouses and retail food refrigeration (40 CFR part 82), and as per- and polyfluoroalkyl substances (PFAS) which are broadly used in food, water, and increasingly consumer products, as exposure to some types of PFAS substances are linked to serious health effects. None of EPA's regulations regulating HFC–152a and HFC–134a address the inhalation hazard the proposed rule is intended to address, and thus do not overlap or conflict with the proposed rule.

F. Potential Impact on Small Entities

1. Impact on Small Manufacturers

For the majority of firms in this market, aerosol duster products are ancillary to their manufacturing of products such as degreasers, lubricants and other aerosol products that would not be regulated under the proposed rule. Staff identified 31 firms that would be impacted by the proposed rule. Twenty-six of these firms are manufacturers of aerosol duster products and five are wholesales/importers. Among the 26 manufacturers of aerosol duster products, 20 would be considered small firms according to Small Business Administration (SBA) thresholds.[47] The SBA size standard threshold for NAICS code 325998, All Other Miscellaneous Chemical Product and Preparation Manufacturing, is having fewer than 650 employees in order to be considered small.

Staff identified four small domestic manufacturers of aerosol duster products where the potential impact of the proposed regulation could be significant. These firms enjoy strong brand recognition, and their products are widely used aerosol duster products for electronics. For these firms, their aerosol duster products comprise a large share of their total product offerings. Staff assessed the impact to these small manufacturers to be significant (*i.e.,* greater than one percent of annual revenue) as the proposed rule is expected to increase the price of a canister of aerosol duster product more than threefold, and subsequently cause a steep decline in demand.[48]

[47] Small Business Administration, Table of Size Standards (*https://www.sba.gov/document/support-table-size-standards*).

[48] The proposed rule is expected to cause firms to shift to more expensive propellants, and therefore is expected to increase the price of a canister of aerosol duster product. For a more complete discussion of the expected price increase

Continued

2. Impact on Small Importers

Staff identified five wholesalers/importers of aerosol duster products. The SBA size standard threshold for NAICS code 424690, Other Chemical and Allied Products Merchant Wholesalers, is having fewer than 175 employees in order to be considered small. According to SBA size standards, two of these firms would be considered small and three would be considered large. Staff assessed the impact to these small importers and wholesalers to be significant (*i.e.,* greater than one percent of annual revenue) as the proposed rule is expected to increase the price of a canister of aerosol duster product more than threefold, and subsequently cause a steep decline in demand.

3. Conclusion

Given the significant impact that the proposed rule would have on the market overall, staff assessed that there would be a significant impact on a substantial number of small entities from the proposed rule.

G. Alternatives for Reducing the Adverse Impact on Small Businesses

Section VIII.D Preliminary Regulatory Analysis of this preamble provides a discussion of four alternatives to the proposed rule that were considered and why those alternatives were rejected. While the alternatives could reduce the burden on small entities, none of the alternatives are consistent with achieving the rule's objective of improving consumer safety by protecting consumers from the inhalant risks posed by aerosol duster products. The Commission is not proposing these alternatives because they would not effectively reduce the number of injuries and fatalities associated with aerosol duster products as discussed in section VIII of the preamble.

The Commission welcomes public comments on this IRFA. Small businesses that believe they would be affected by the proposed rule are encouraged to submit comments. The comments should be specific and describe the potential impact, magnitude, and alternatives that could reduce the impact of the proposed rule on small businesses.

X. Paperwork Reduction Act

This proposed rule contains information collection requirements that are subject to public comment and review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (PRA). 44 U.S.C. 3501–3521. We describe the provisions in this section of the document with an estimate of the annual reporting burden. Our estimate includes the time for gathering certificate data and creating General Certificates of Conformity (GCCs), the keeping and maintaining of records associated with the GCCs, and the disclosure of GCCs to distributors and retailers.

CPSC particularly invites comments on: (1) whether the collection of information is necessary for the proper performance of the CPSC's functions, including whether the information would have practical utility; (2) the accuracy of CPSC's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used; (3) the accuracy of CPSC's estimate of the share of canisters used as inhalants; (4) ways to enhance the quality, utility, and clarity of the information to be collected; (5) ways to reduce the burden of the collection of information on respondents, including the use of automated collection techniques, when appropriate, and other forms of information technology; and (6) estimated burden hours associated with label modification, including any alternative estimates.

Title: Ban on Specified Aerosol Duster Products.

Description: The proposed rule would ban any canister of an aerosol duster product containing more than 18 mg in any combination of HFC–152a and/or HFC–134a.

Description of Respondents: Persons who manufacture or import aerosol duster products. Staff estimates the burden of this collection of information as follows in Table 9.

TABLE 9—ESTIMATED ANNUAL REPORTING BURDEN

Burden type	Number of respondents	Frequency of responses	Total annual responses	Minutes per response	Total burden hours
GCC Creation	30	5	150	20	50
Recordkeeping	30	5	150	2	5
Third Party Disclosure	30	500	15,000	5	1,250
Total			15,300		1,305

Section 14(a)(1) of the CPSA, 15 U.S.C. 2063(a)(1), would require manufacturers to certify that their products conform to the proposed rule and issue a GCC. There are 31 known corporate entities supplying aerosol duster products to the U.S. market (consisting of 26 manufacturers and 5 wholesalers/importers), and we assume the majority of these entities would respond annually, though this may be an overestimate.

On average, each entity may respond 5 times per year for collection requirements related to compliant aerosol duster products in the market. Each manufacturer or importer that responds may create 5 certificates annually for a total of 150 responses (30 responses × 5 responses per respondent = 150 annual responses). The estimated time required to create a GCC is about twenty minutes. Therefore, the estimated burden associated with issuance of GCCs is 50 hours (150 responses × 20 minutes per response = 50 hours).

We estimate for the purpose of this burden analysis that records supporting GCC creation, including testing records, would be maintained for a 5-year period. Staff estimates another 150 record-keeping responses, each one of which requires two minutes per year in routine recordkeeping. This adds up to 5 hours (150 records × 2 min per record = 300 minutes or 5 hours).

Section 14(g)(3) of the CPSA also requires that GCCs be disclosed to third party retailers and distributors. We estimate that each respondent will submit 5 GCCs to 100 retailers or distributors annually. Therefore, respondents are estimated to disclose 15,000 GCCs to third party retailers and

and subsequent projected decline in demand, see the full economics memorandum in Tab A.

distributors annually (30 responses × 500 disclosures per year = 15,000 responses). Staff estimates each one of which requires 5 minutes per year. This adds up to 1,205 hours (15,000 responses × 5 minutes per response = 75,000 minutes or 1,250 hours).

Based on this analysis, the proposed ban for aerosol duster products would impose a total paperwork burden to industry of 1,305 hours (50 hours for GCC creation + 5 hours for recordkeeping + 1,250 hours for third-party disclosure). To estimate the cost to industry staff uses total compensation data from the U.S. Bureau of Labor Statistics (BLS) on hourly compensation paid to private industry workers in goods-producing industries of $44.75.[49] At an hourly wage rate of $44.75, the estimated cost of the collection is $58,399 annually (1,305 hours × $44.75 = $58,398.75). There are no operating, maintenance, or capital costs associated with the collection.

Existing aerosol duster product manufactures would incur these costs in the first year following the proposed rule's effective date. In subsequent years, costs could be less, depending on the number of new GCCs issued for aerosol duster products. As required under the PRA (44 U.S.C. 3507(d)), CPSC has submitted the information collection requirements of this proposed rule to the OMB for review. Interested persons are requested to submit comments regarding information collection by September 30, 2024, to the Office of Information and Regulatory Affairs, OMB as described under the **ADDRESSES** section of this notice.

XI. Effective Date

The FHSA does not specify any requirements regarding the setting of an effective date for a rule promulgated pursuant to that authority. The Administrative Procedure Act (APA) generally requires that the effective date of a rule be at least 30 days after publication of a final rule. 5 U.S.C. 553(d).

The Commission preliminarily proposes an effective date of 30 days after publication of the final rule in the **Federal Register**. Pursuant to section 19(a)(2)(D) of the CPSA, once the rule is effective, it would be unlawful to ''sell, offer for sale, manufacture for sale, distribute in commerce, or import into the United States'' any aerosol duster product containing 18 mg in any combination of HFC–152a and/or HFC–134a. 15 U.S.C. 2068(a)(2)(D). Therefore, it would be unlawful to sell any remaining inventory of aerosol duster products containing more than 18 mg of HFC–152a or HFC–134a as of the effective date.

While there are potential vulnerabilities regarding shortages and revenue loss, these potential vulnerabilities are greatly outweighed by the reduction in benefits that would result from delaying the effective date past 30 days. Staff estimates the incremental loss in benefits from a 60-day effective date—30 additional days from the recommended 30-day effective date—to be $45.71 million in net benefits, using a 2 percent discount rate. This loss is the result of 246 additional injuries and 3 additional deaths from delaying the rule for an additional 30 days. Under a 180-day effective date—150 additional days from the recommended 30-day effective date—staff estimates a loss of $228.57 million in net benefits. This estimated further loss is the result of 1,229 additional injuries and 17 additional deaths from delaying the rule for 150 days.

Staff also considered manufacturers' expected actions required to become compliant with the proposed ban in recommending the 30-day effective date. Manufacturers of aerosol duster products would switch to an alternative propellant. Switching to an alternative propellant is a near drop-in replacement, having only minimal changes required to formulations and equipment. As such, while the new propellant itself will be more expensive, the one-time costs of switching propellants will be negligible. The manufacturing process which includes filling, sealing, and crimping the aerosol duster products remains unchanged from current manufacturing practices. It would also require manufacturers to change the labels on their canister to list the alternative propellant, which staff assesses can be accomplished in 30 days. Therefore, the cost of any retooling in the manufacturing process would be minimal. In addition, consumer aerosol duster products that would not be impacted by the proposed rule are already in use, and available for sale. Alternatively, instead of switching to a new propellant in an aerosol duster product, as discussed in section III.C of this preamble, there are manufacturers and importers that currently supply battery powered USB rechargeable duster products to the market, which provide similar utility to consumers as an aerosol duster product. For these reasons, the Commission proposes a 30-day effective date. The Commission invites comments regarding the amount of time needed to come into compliance with a final rule.

XII. Certification

Section 14(a)(1) of the CPSA requires that products subject to a consumer product safety rule under the CPSA, or to a similar rule, ban, standard or regulation under any other act enforced by the Commission, must be certified with a GCC as complying with all applicable CPSC-enforced requirements. 15 U.S.C. 2063(a)(1). A final rule establishing a ban under the FHSA would subject aerosol duster products to this requirement. Aerosol duster products would need a certification stating that they do not contain more than 18 mg in any combination of HFC–152a and/or HFC–134a.

XIII. Environmental Considerations

Generally, the Commission's regulations are considered to have little or no potential for affecting the human environment, and environmental assessments and impact statements are not usually required. *See* 16 CFR 1021.5(a). The proposed rule is not expected to have an adverse impact on the environment and is considered to fall within the ''categorical exclusion'' for the purposes of the National Environmental Policy Act. 16 CFR 1021.5(c). In fact, because HFO–1234ze was introduced as an environmentally friendly alternative to HFC–134a, substitution of HFO–1234ze for HFO–134a in aerosol duster products as a result of the proposed rule could have beneficial environmental effects.

XIV. Preemption

Executive Order (E.O.) 12988, Civil Justice Reform (Feb. 5, 1996), directs agencies to specify the preemptive effect of a rule in the regulation. 61 FR 4729 (Feb. 7, 1996). The proposed ban on any aerosol duster canister containing more than 18 mg in any combination of HFC–152a and/or HFC–134a is being promulgated under the authority of the FHSA. 15 U.S.C. 1261–1278. The FHSA provides that, generally, if the Commission issues a banning rule under section 2(q) of the FHSA to protect against a risk of illness or injury associated with a hazardous substance, ''no State or political subdivision of a State may establish or continue in effect a requirement applicable to such substance and designed to protect against the same risk of illness or injury unless such requirement is identical to the requirement established under such regulations.'' 15 U.S.C. 1261 Note. Upon application to the Commission, a State or local standard may be excepted from

[49] U.S. Bureau of Labor Statistics, ''Employer Costs for Employee Compensation,'' December 2023, Table 4, total compensation for private industry working in goods-producing industries: *https://www.bls.gov/news.release/archives/ecec_03132024.pdf.*

this preemptive effect if the State or local standard: (1) provides a higher degree of protection from the risk of injury or illness than the FHSA standard and (2) does not unduly burden interstate commerce. In addition, the Federal government, or a State or local government, may establish and continue in effect a non-identical requirement that provides a higher degree of protection than the FHSA requirement for the hazardous substance for the Federal, State or local government's own use. 15 U.S.C. 1261 note. Thus, with the exceptions noted above for standards that provide higher levels of protection, the proposed rule banning any aerosol duster canister containing more than 18 mg in any combination of HFC–152a and/or HFC–134a would preempt non-identical state or local requirements applicable to such aerosol duster products designed to protect against the same risk of injury.

XV. Request for Comments

We invite all interested persons to submit comments on all aspects of the proposed rule. The Commission specifically seeks comment on the following topics:

- Alternative propellants manufacturers would likely use in aerosol duster products and the intoxicating effects and safety implications of inhaling these alternative propellants;
- Any test methods that can be used to test for compliance of HFC–152a and HFC–134a at the proposed level of 18 mg per single aerosol duster canister;
- Information or data on future market trends, including projected sales, size of the market, growth of firms in the market, forthcoming innovation, or any other information that would inform CPSC of the expected future for the aerosol duster market with or without the proposed rule; and
- The ability of firms to complete these actions to produce compliant products within the proposed effective date.

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List of Subjects in 16 CFR Part 1500

Consumer protection, Hazardous materials, Hazardous substances, Imports, Infants and children, Labeling, Law enforcement, and Reporting and recordkeeping.

For the reasons stated in the preamble, the Commission proposes to amend 16 CFR part 1500 to read as follows:

PART 1500—HAZARDOUS SUBSTANCES AND ARTICLES: ADMINISTRATION AND ENFORCEMENT REGULATIONS

■ 1. The authority for part 1500 continues to read as follows:

Authority: 15 U.S.C. 1261–1278.

■ 2. In § 1500.17, add paragraph (a)(14) to read as follows:

§ 1500.17 Banned hazardous substances.

(a) * * *

(14)(i) *Aerosol Duster Products Containing more than 18 mg in any combination of HFC–152a and/or HFC–134a.* Any canister of an aerosol duster product containing more than 18 mg in any combination of 1,1-difluoroethane (HFC–152a, CAS #75–37–6) and/or 1,1,1,2-tetrafluoroethane (HFC–134a, CAS #811–97–2). The term aerosol duster product means a product that uses a pressurized canister filled with gas or liquified gas to create a stream of gas propellant that can be used to dislodge or remove dust and debris.

(ii) *Prohibited Stockpiling—*

(A) *Prohibited acts.* Manufacturers and importers of aerosol duster products shall not manufacture or import aerosol duster products that do not comply with paragraph (a)(1)(i) in any one-month period between [DATE OF PUBLICATION OF FINAL RULE] and [EFFECTIVE DATE OF THE FINAL RULE] at a rate greater than 105 percent of the rate at which they manufactured or imported aerosol duster products during the base period for the manufacturer or importer.

(B) *Base period.* The base period for aerosol duster products is the average monthly manufacture or import volume for any month within the last 13 months immediately preceding the month of publication of the final rule.

(iii) *Findings—*

(A) *General.* To issue a rule under section 2(q)(1) of the FHSA, 15 U.S.C. 1261(q)(1), classifying a substance or article as a banned hazardous substance, the Commission must make certain findings and include them in the regulation. These findings are discussed in paragraphs (a)(14)(iii)(B) through (D) of this section.

(B) *Voluntary standard.* No voluntary standard currently exists to address the potential for death and injury posed by inhalant abuse of aerosol duster products containing HFC–152a or HFC–134a. The Commission finds that there is no evidence that a voluntary standard will be adopted and implemented within a reasonable period of time that would eliminate or adequately reduce the risk of injury regarding the potential for death and injury posed by the intentional inhalant abuse of aerosol duster products.

(C) *Relationship of benefits to costs.* The Commission estimates that the ban will be effective in reducing the potential for injury and death from compliant aerosol duster products. When benefits are compared to costs, the estimated benefits of the rule are greater than the estimated costs. Net benefits (benefits less costs) are estimated to be $1.93 billion on an annualized basis. Staff performed a 30-year prospective cost analysis (2026–2055) on all cost categories and estimated the total annualized cost from the proposed rule to be $123.73 million. Staff estimated the total annualized benefits from the proposed to be $2.05 billion, discounted at 2 percent.

(D) *Least burdensome requirement.* The Commission considered the following alternatives: require a performance requirement for aerosol duster products preventing inhalation of their propellant; require aversive agents (bitterants); require warning labels; and take no action and rely on a voluntary standard. The Commission finds none of the alternatives considered would adequately reduce the risk of death or injury. Therefore, the Commission finds that a ban on any aerosol duster product containing more than 18 mg in any combination of 1,1-difluoroethane (HFC–152a, CAS #75–37–6) and/or 1,1,1,2-tetrafluoroethane (HFC–134a, CAS #811–97–2) is the least burdensome requirement that would prevent or adequately reduce the risk of death or injury.

Alberta E. Mills,

Secretary, Consumer Product Safety Commission.

[FR Doc. 2024–16716 Filed 7–30–24; 8:45 am]

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DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 117

[Docket No. USCG–2022–0221]

RIN 1625–AA09

Drawbridge Operation Regulation; Rancocas Creek, Burlington County, NJ

AGENCY: Coast Guard, DHS.

ACTION: Supplemental notice of proposed rulemaking.

SUMMARY: The Coast Guard proposes to modify the operating schedule that governs the US Route 543 (Riverside-Delanco) Bridge across Rancocas Creek, mile 1.3, at Burlington County, NJ. The proposed rule allows the drawbridge to change its operating schedule to reduce the number of bridge openings during off-peak hours. We invite your comments on this proposed rulemaking.

DATES: Comments and related material must reach the Coast Guard on or before August 30, 2024.

ADDRESSES: You may submit comments identified by docket number USCG–2022–0221 using Federal Decision Making Portal at *https://www.regulations.gov.*

See the ''Public Participation and Request for Comments'' portion of the **SUPPLEMENTARY INFORMATION** section below for instructions on submitting comments. This notice of proposed rulemaking with its plain-language, 100-word-or-less proposed rule summary will be available in this same docket.

FOR FURTHER INFORMATION CONTACT: If you have questions on this supplemental proposed rule, call or email Mr. Hal R. Pitts, Fifth Coast Guard District Chief Bridge Branch (dpb); telephone 571–607–8298, email *Hal.R.Pitts@uscg.mil.*

SUPPLEMENTARY INFORMATION:

I. Table of Abbreviations

CFR Code of Federal Regulations
DHS Department of Homeland Security
FR Federal Register
NPRM Notice of proposed rulemaking
SNPRM Supplemental notice of proposed rulemaking
Pub. L. Public Law
§ Section
U.S.C. United States Code

II. Background, Purpose and Legal Basis

On May 23, 2022, we published a Test Deviation entitled Drawbridge Operation Regulation; Rancocas Creek, Burlington County, NJ, in the **Federal Register** (87 FR 31182). Having received no comments from the Test Deviation, we published an NPRM on April 24, 2023, in the **Federal Register** (88 FR 24739). We received no comments on the proposed rule.

The US Route 543 (Riverside-Delanco) Bridge across Rancocas Creek, mile 1.3, at Burlington County, NJ, and has a vertical clearance of 4 feet above mean high water in the closed-to-navigation position. The bridge currently operates under 33 CFR 117.745(b).

The Rancocas Creek is used predominately by recreational vessels and pleasure crafts. The bridge is currently required to open on signal from 7 a.m. to 11 p.m. from April 1 through October 31 and with 24-hour advance notice from November 1 through March 31. The bridge is allowed to remain closed to navigation at all other times.

The three-year, monthly average number of bridge openings from 7 a.m. to 3 p.m., Monday through Friday, 7 a.m. to 1 p.m., Saturday and Sunday, and from 8 p.m. to 11 p.m., daily, as drawn from the data contained in the bridge tender logs, is presented below.

April to October (2018, 2019 and 2020)	Average monthly openings
Monday–Friday, 7 a.m. to 3 p.m	4
Saturday & Sunday, 7 a.m. to 1 p.m	2
Daily, 8 p.m. to 11 p.m	7

III. Discussion of Comments and Change

As mentioned above, we received no comments from either the Test Deviation or the NPRM, however we noticed that we had not properly conveyed the new operating schedule of the bridge during the months from April