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January 30, 2023

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U.S. Environmental Protection Agency  
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Submitted electronically

RE: Phasedown of Hydrofluorocarbons: Restrictions on the Use of Certain Hydrofluorocarbons under Subsection (i) the American Innovation and Manufacturing Act of 2020 [Docket ID: EPA-HQ-OAR-2021-0643]

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Dear Ms. Cain,

On behalf of Heating, Air-conditioning & Refrigeration Distributors International (HARDI), I write to offer comments on the Environmental Protection Agency's (EPA) proposed regulation for the Phasedown of Hydrofluorocarbons: Restrictions on the Use of Certain Hydrofluorocarbons under Subsection (i) the American Innovation and Manufacturing Act of 2020 [Docket ID: EPA-HQ-OAR-2021-0643] (herein referred to as the Technology Transition Rule).

HARDI is a trade association comprised of over 800 member companies, more than 400 of which are U.S.-based wholesale distribution companies. Over 80 percent of HARDI's distributor members are classified as small businesses that collectively employ more than 60,000 U.S. workers, representing more than \$40 billion in annual sales and an estimated 70 percent of the U.S. wholesale distribution market of heating, ventilation, air-conditioning, and refrigeration (HVACR) equipment, supplies, and controls.

HARDI appreciates EPA's request for comments on this proposed rule. As wholesale distributors of HVACR products and refrigerants, HARDI members are directly impacted by the transition from old technologies utilizing high global warming potential (GWP) refrigerants to newer low-GWP alternatives. Ensuring a smooth transition from one generation of hydrofluorocarbons (HFC) to the next is an important step in achieving the phasedown outlined in the American Innovation and Manufacturing Act<sup>1</sup> (AIM Act) and the Kigali Amendment to the Montreal Protocol. The Technology Transition Rule will assist us in achieving a smooth transition and ensure American manufacturers are on an even playing field with manufacturing in countries on different phasedown schedules.

## **1. Phasedown of Hydrofluorocarbons**

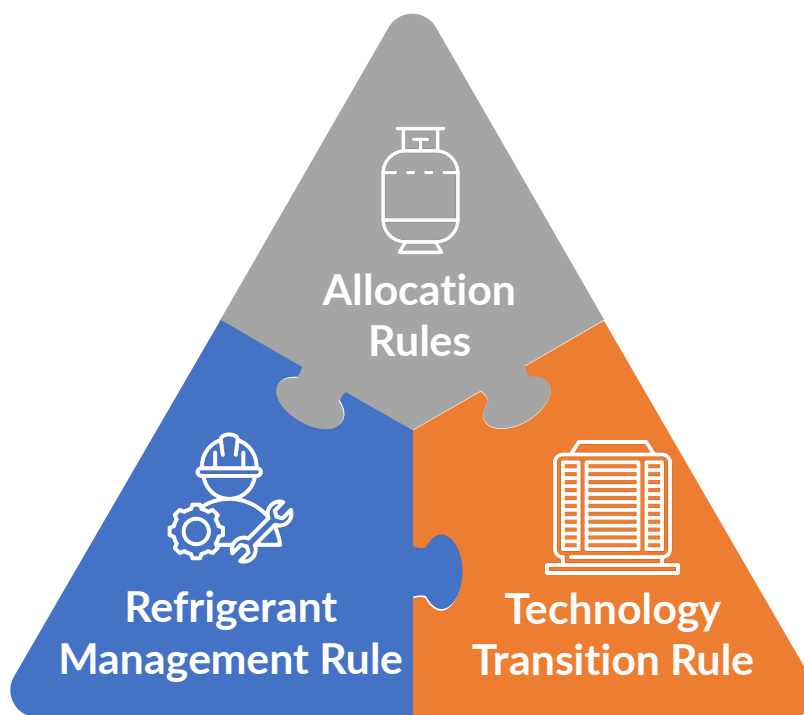
HARDI and the entire HVACR industry have supported the phasedown of HFCs, from the Kigali Amendment's development to the AIM Act's passage. Accordingly, HARDI has generally endorsed the previous regulations that created the allowance allocation system currently in place and proposed to continue at least through 2028 to reduce the quantity of HFCs produced and consumed in the United States.

The AIM Act intelligently balances three sets of rulemakings to ensure a smooth transition: the Allowance Allocation Rule to phase down the production and consumption of HFCs; the Refrigerant Management Rule to reduce leaks, improve quality installation, and increase recovery and reclamation of existing refrigerants; and the Technology Transition Rule to help guide the industry away from high-GWP refrigerants to newer low-GWP technologies and provide a global

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<sup>1</sup> American Innovation and Manufacturing Act, Public Law No: 116-260 Division S, Sec. 103 (Date: December 27, 2020, enacted H.R. 133) Available from: <https://www.congress.gov/bill/116th-congress/house-bill/133/text?r=6&s=1>.

backstop to different phasedown schedules. These three rulemakings, while separate, are also interconnected in how they influence the phasedown. The refrigerant management rule will increase recovery and reclaim to ensure an adequate supply of refrigerant to service existing equipment, while the allocation rule reduces the supply of virgin refrigerant. The Technology Transition Rule moves the industry towards lower-GWP equipment to reduce demand for high-GWP refrigerants. The allocation rule reduces the supply of virgin refrigerant to create a market



*Figure 1 The Three Interconnected Rules Guiding the HFC Phasedown*

incentive for consumers to buy new low-GWP technology.

With the allowance allocation system in place, the next step in reducing the use of HFCs is to transition the technology using HFCs to the next generation. This Technology Transition Rule accomplishes that by limiting the manufacture of products designed to employ high-GWP refrigerants. The HVACR industry has already invested millions in moving to the next set of technologies that utilize low-GWP refrigerants. HARDI appreciates the EPA for following many

of the recommendations submitted in industry petitions. HARDI generally supports the Technology Transition Rule because it facilitates the switch to new refrigerants; however, there are three areas where HARDI strongly disagrees with EPA's proposal:

1. Expanding the definition of "manufacture" to include necessary processes to install equipment in end-consumers facilities effectively creates an installation prohibition which will force transitions on an unachievable timeline. HARDI opposes limiting products already in commerce from being installed for their intended purpose.
2. EPA's analysis of substitute refrigerants for commercial refrigeration includes products that the EPA has not yet approved for use in that sector. Setting a manufacturing transition date less than a year after refrigerants are likely to be approved at the earliest will cause confusion in the industry. A smooth transition requires the industry to safely and economically manufacture, distribute, and install equipment.
3. Establishing a nationwide limited sell-through date for already manufactured HVACR harms distributors and contractors and is unnecessary to reach the environmental benefits of the HFC phasedown. Therefore, HARDI opposes a limited sell-through on any products already entered into commerce.

The balance of these comments will focus on these three provisions and why EPA should not finalize the rule with these components as written.

## **2. Definition of "Manufacture."**

HARDI members sell Refrigeration, Air Conditioning, and Heat Pump (RACHP) products in the sectors and sub-sectors listed in the proposed rule. HARDI is concerned that the definition of "manufacture" will have unintended consequences on the industry, especially in the commercial refrigeration sector. The proposed definition says:

*Manufacture* means to complete a product's manufacturing and assembly processes such that it is ready for initial sale, distribution, or operation. For equipment that is assembled and charged in the field, manufacture means to complete the circuit holding the regulated substance, charge with a full charge, and otherwise make functional for use for its intended purpose.

The second sentence in the proposed definition would prohibit the installation of many products in the refrigeration sector, and the final clause of the second sentence could be misinterpreted to include split system air conditioners and heat pumps when the outdoor and indoor units are connected to "make functional for use for its intended purpose." HARDI believes a date of manufacture for new equipment should be defined as the date on the nameplate. A separate but similar definition can be used for products that do not contain a nameplate, such as foams.

HARDI also encourages EPA to include provisions that do not prevent components such as compressors and coils designed to use high-GWP refrigerants from being manufactured after the compliance deadline to allow for repairs to existing equipment, as long as the initial charging of the equipment was before the compliance deadline. For example, a compressor made in 2028 could be used to repair an air-conditioning system installed in 2021 because the system existed before the compliance deadline of January 1, 2025.

HARDI agrees with EPA that the restrictions in the proposed rule should not apply to existing products. However, ensuring that existing equipment can be repaired and maintained is crucial to the long-term economic impact of this regulation.

### **3. Commercial Refrigeration transition dates too soon without approved refrigerants.**

EPA provided a list of substitutes<sup>2</sup> for the various sectors and sub-sectors regulated in the proposed rule. While many of these refrigerants are technologically feasible in these sub-sectors, not all commercial refrigeration refrigerants have been approved by the Significant New Alternatives Policy (SNAP) Program. As a result, it will take time for the industry to develop products to use these refrigerants, with many companies waiting to spend research dollars until the SNAP Program has approved these refrigerants. Based on an analysis of the release dates for proposed and final rules, the SNAP Program takes an average of 330 days to approve new refrigerants. Based on this average, the agency would need to release a proposed SNAP listing by February 5, 2023, to complete the rule by January 1, 2024, one year before EPA's proposed transition to low-GWP refrigeration products.

HARDI encourages EPA to delay the compliance date for commercial refrigeration until January 1, 2026, in line with the industry petitions, to give enough time for the industry to comply with the provisions using the substitute refrigerants awaiting SNAP approval.

### **4. A limited sell-through will harm distributors and contractors**

HARDI members sell equipment in the RACHP sectors and associated sub-sectors and would be affected by the proposed sales prohibition. EPA has proposed limiting the sell-through of equipment using regulated substances that are non-compliant with the manufacturing prohibition to one year after the manufacturing prohibition. For most sub-sectors, this date is January 1, 2026, as outlined in proposed § 84.54 (b):

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<sup>2</sup> EPA, *American Innovation and Manufacturing Act of 2020 – Subsection (i)(4) Factors for Determination: List of Substitutes*, December 2022

“Effective January 1, 2026, no person may sell or distribute, offer to sell or distribute, make available to sell or distribute, purchase or receive, attempt to purchase or receive, or export any product that uses or is intended to use a regulated substance or blend containing a regulated substance as listed in §§ 84.56(a), 84.56(c), 84.56(d), and 84.56(e), except after a period of ordinary utilization or operation of the product by an ultimate consumer.”

Similar language is found in § 84.54 (b) and would also limit the sell-through of HVACR equipment in RACHP sub-sectors. HARDI opposes this definition because it affects products already in commerce and will negatively impact wholesale distributors in the RACHP sectors.

EPA's proposal to limit the sale of HVACR equipment one year after the manufacturing prohibition is unique compared to the numerous regulations affecting thousands of different types of durable goods sold in the United States. For example, the United States Department of Energy regulates nearly 60 Energy and Water Conservation Standards under the Energy Policy and Conservation Act. Of the 59 standards currently finalized by the department, every nationwide standard uses the product's date of manufacture as a compliance deadline, and there is no limitation on the sell-through of a product made before the compliance deadline (See Appendix A). One standard, residential split-system central air-conditioners, imposes regional standards on top of a nationwide standard. The southeast and southwest regions, which have higher efficiency requirements than the base nationwide standard, also have a Congressionally mandated install date requirement. However, this provision does not eliminate the equipment's economically beneficial value because it can still be sold in the states unaffected by the separate regional standards. Colloquially, the unaffected states are referred to as the north region, even though it is not defined as a region by the standard. As seen in 2022, the requirement to have the equipment installed before

January 1, 2023, played havoc on affected distributors and has delayed the availability of compliant equipment in the north as supply chains are still postponing the delivery of the new, more efficient equipment. A nationwide limited sell-through will have an even more significant impact on the wholesale distribution industry.

Limiting the sale of products already in commerce harms manufacturers, wholesale distributors, and contractors. As wholesaler distributors, HARDI members purchase products from manufacturers, including RACHP equipment, and serve as a “one-stop shop” to sell equipment, parts, and supplies to HVACR contractors, service companies, and other businesses that use or service HVACR equipment. Wholesale distributors also provide technical support, training, and other services to ensure customers remain compliant with federal and state regulations. The easiest method for determining if a product is legal to sell and install is to use the date of manufacture as the sole compliance deadline.

HVACR distributors carry large inventories of equipment, parts, and supplies for many reasons, all of which are to serve their customers better. The primary reason is to meet customer demand. When a customer needs a part or piece of equipment to repair or replace a consumer's air-conditioner, heat pump, or commercial refrigeration system, wholesale distributors need to have the part on hand to meet this customer's demand for a wide range of manufacturer brands, models, and applications, regardless of how often the product is in demand. Wholesale distributors also carry large amounts of inventory to maintain competitive pricing. Distributors can use economies of scale to get bulk pricing discounts and pass these on to customers. While it is advantageous to buy a large amount of inventory, the amount of inventory must be balanced against other costs, such as storage space leasing, warehouse mortgages, building utilities, and insurance on the products while stored in the warehouse, collectively these carrying costs combined with market



demand determine the maximum amount of inventory a distributor can economically have on hand. Even though carrying costs are consistent year over year, it can be tough to predict local market demand, forcing distributors to balance having too little and too much inventory. Every year, distributors must monitor market conditions to ensure they can sell out of most of their inventory at the right time. Failing to do so risks either not meeting customer demand or carrying increased costs for several months while large amounts of excess equipment remain in stock. Wholesale distribution has significant financial risk if the market or regulations reduce demand for HVACR products. For this reason, putting a limited sell-through on any product already in commerce will negatively impact the small businesses that make up the HVACR wholesale distribution industry while providing almost no environmental benefit due to the decreasing supply of HFC refrigerants in the coming years.

If the EPA finalizes the Technology Transition Rule with a limited sell-through in place, wholesale distributors will face the following:

- Loss of revenue from trying to “fire sale” any remaining inventory before the regulatory deadline,
- Increased carrying costs on unsold inventory that will have no economically beneficial value,
- Reduced cash flow for future operations,
- Increased difficulty predicting market demand as the entire industry faces the same deadline to deplete their inventories, and
- Decreased inventory can lead to delayed projects while certain parts or components are located and shipped, which increases project costs.

Negative impacts on wholesale distributors are not the only reasons to forgo implementing a

limited sell-through. There are also many positive impacts from only using the date of manufacture as the compliance deadline. Limiting compliance to the Technology Transition Rule to only using the date of manufacture will:

- Decrease uncertainty about what products can be used to install new systems versus what must be used to repair or retrofit existing systems,
- Institute the most cost-effective compliance system for transitioning to new technology, and
- Reduce waste, unused equipment under the proposed rule cannot be sold, installed, or exported; even attempting to scrap the equipment will incur costs to the distributor to remove regulated substances.

HARDI understands the EPA's desire to have a backstop to prevent an over-supply of high-GWP products from being installed for years beyond the manufacturing prohibition. However, the reality of the overall HFC phasedown makes this impossible. The 40 percent drop in production and consumption of HFCs in the United States in 2024 will shrink the available refrigerant supply to pre-charge or field-charge high quantities of equipment. With so much competition for high-GWP refrigerants, the price of installing equipment using these refrigerants would quickly become higher than the price to install low-GWP equipment and make it harder to service existing equipment because of the increased refrigerant price. The market will serve as a backstop to prevent new installations of high-GWP equipment due to rising refrigerant prices.

For these reasons, the EPA should not finalize the Technology Transition Rule with a limited sell-through of equipment already in commerce.

## **5. EPA’s definition of “use” is overly broad and far beyond the statutory authority granted by the AIM Act.**

The AIM Act provides EPA with authority to prohibit the manufacture of high-GWP equipment by saying, “the Administrator may by rule restrict, fully, partially, or on a graduated schedule, the use of a regulated substance in the sector or subsector in which the regulated substance is used.”<sup>3</sup> The Technology Transition Rule sets out to restrict the manufacture of equipment and products using regulated substances, in the case of the RACHP sectors, equipment using regulated substances for heat transfer purposes. The AIM Act allows the EPA to restrict “the use of a regulated substance in the sector or subsector in which the regulated substance is used.” But, unfortunately, the EPA's definition of "use" goes far beyond the word's common meaning.<sup>4</sup> EPA included the following definition in the proposed rule:

Use means for any person to take any action with or to a regulated substance, regardless of whether the regulated substance is in bulk, contained within a product, or otherwise, except for the destruction of a regulated substance. Actions include, but are not limited to, the utilization, deployment, sale, distribution, discharge, incorporation, transformation, or other manipulation.

HARDI strongly disagrees with the EPA that the statutory text would allow the definition of "use" to include "any action with or to." Had Congress wanted to give the EPA broad authority under subsection (i), it would have used the same language from subsection (h): “any practice, process,

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<sup>3</sup> Id. at 1, subsection (i)(1)

<sup>4</sup> Bond v. United States, 572 U. S. 844, 861 (2014) (majority opinion), <https://casetext.com/case/bond-v-united-states-9>

or activity.” Instead, Congress chose to limit the agency's authority to “the use of a regulated substance in the sector or subsector in which the regulated substance is used.”

To justify its greatly expanded definition of the word “use” to include “any action,” the EPA provides two definitions from online dictionaries:

1. Meriam Webster: transitive verb, “to put into action or service,” and
2. Lexico.com: verb, “to take, hold, or deploy (something) as a means of accomplishing a purpose or achieving a result; employ.”

Unfortunately, the link to the definition from lexico.com is no longer working. The link now redirects to dictionary.com, which does not have the same definition that EPA provides and instead lists multiple meanings based on if the word is used as a noun or a verb; however, neither definition is used by the agency in the proposed rule:

1. Verb: “to employ for some purpose; put into service; make use of.”
2. Noun: “the act of employing, using, or putting into service.”

Interestingly, the word “use” is used as both a noun and a verb in subsection (i)(1) [parts of speech added], “the Administrator may by rule restrict, fully, partially, or on a graduated schedule, the use [*noun*] of a regulated substance in the sector or subsector in which the regulated substance is used [*verb*].” Knowing that the word “use” is used as both a noun and a verb it is essential to distinguish both definitions, Merriam Webster’s noun definition of “use” is “the act or practice of employing something.” If we insert these definitions into the AIM Act language, the limits on EPA authority become pretty clear:

[T]he Administrator may by rule restrict, fully, partially, or on a graduated schedule, the act or practice of employing a regulated substance in the sector or

subsector in which the regulated substance is put into action or service. [*use and used replaced with definitions from Merriam-Webster*]

[T]he Administrator may by rule restrict, fully, partially, or on a graduated schedule, the act of employing, using, or putting into service a regulated substance in the sector or subsector in which the regulated substance is employed for some purpose; put into service; made use of. [*use and used replaced with definitions from dictionary.com*]

When we compare the authority granted by the more precise language above to the definition used in the proposed rule, it becomes evident that the agency has created an overly broad definition. Additionally, the agency has used that definition to attempt to impose provisions far beyond the authority granted by the AIM Act.

#### **6. EPA exceeds the authority of the AIM Act by using an overly broad definition to impose a limited sell-through on the industry.**

EPA's definition of "use" is overly broad by extending the agency's authority to regulate "any activity." A proper definition within the context of the AIM Act language should in no way be construed to include sale or distribution since neither action would be an act or practice of employing, using, or putting a regulated substance into service. It appears that EPA's one thin strand connecting a definition of "use" and the sale or distribution of products made of or containing HFCs is the word "hold" mentioned in the now defunct lexico.com's verb definition. While using a verb definition for a noun version of "use" should on its own disqualify this definition from being used, we still want to examine why this logic is unsound and should not be used. For the sake of argument, we will look at how the definition of "use" could include holding or possessing a product containing or made of HFCs. The first dictionary HARDI could find that

had even a synonym to “hold” was Black’s Law Dictionary's definition, which included “possession” in its noun definition.<sup>5</sup> Black’s Law Dictionary is the most used law dictionary in determining the meaning of words in a statute, an apt method to use in this context.<sup>6</sup> Its definition of “use” is:

[Noun.] The application or employment of something; esp., a long-continued possession and employment of a thing for the purpose for which it is adapted, as distinguished from a possession and employment that is merely temporary or occasional.

Using this definition, which contains a synonym for hold, still does not give EPA a broad enough definition of the word "use" to extend its authority to the sale or distribution of products containing or made of regulated substances. Black's Law Dictionary not only states that "use" requires a "long-continued possession," but it also involves "employment of a thing for the purpose for which it is adapted." Sale and distribution are not the "long-continued possession" of a product, and that product, in the case of RACHP, is not employed for the "purpose for which it is adapted," i.e., the transfer of heat. This definition also further distinguishes that "use" is not temporary possession, a crucial descriptor of how distribution works, a temporary possession for selling a product.

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<sup>5</sup> Brian A. Garner, editor in chief. (2019). Black's law dictionary. 11<sup>th</sup> ed. St. Paul, MN: Thomson Reuters.

<sup>6</sup> Georgetown Law Library. What is a Legal Dictionary?, <https://guides.ll.georgetown.edu/secondary/dictionaries>

**7. EPA should not include bulk regulated substances when the regulated substance is not being used.**

Subsection (i)(1) contains two essential parts to describe the authority of the EPA in restricting the use of regulated substances. First, EPA is limited to restricting the "use" of regulated substances. Secondly, the EPA can only restrict the use of regulated substances in the sector or subsector in which the regulated substance is "used."<sup>7</sup> EPA's definition of "use" includes "bulk," however, a regulated substance in bulk has not been put into use and is certainly not yet in a sector or subsector where the regulated substance is used. The only scenario for bulk regulated substances is storage, defined as "the act of putting something away for future use."<sup>8</sup> If the regulated substance is being held for future use, it cannot also be in the "employment of something." Therefore, EPA should not finalize a definition of "use" that can regulate the storage of bulk regulated substances.

**8. EPA's definition of "use" should be limited to the common definition in the context of the AIM Act.**

HARDI suggests that the agency adopt a definition of "use" similar to the noun definition contained in Merriam-Websters Dictionary: "Use means the act or practice of employing a product containing or designed to contain a regulated substance. Use does not include the destruction of a regulated substance." This definition of "use" would still allow the EPA to phase out the production of products made of or containing regulated substances without going beyond the authority of the AIM Act. Under the regulatory scheme proposed in the Technology Transition Rule, the EPA would restrict the act of producing a product that employs regulated substances in

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<sup>7</sup> Id. at 3

<sup>8</sup> *Storage*, Brian A. Garner, editor in chief. (2019). Black's law dictionary. 11<sup>th</sup> ed. St. Paul, MN: Thomson Reuters.

the sectors or subsectors the regulated substance is employed. This definition ensures that the EPA can restrict the use of regulated substances without going beyond the authority of the AIM Act.

### **9. Imposing a limited sell-through on products in commerce would constitute a regulatory taking.**

The Constitution protects individuals' property rights by including in the Fifth Amendment, "nor shall private property be taken for public use, without just compensation."<sup>9</sup> This clause creates a specific difference between the police powers of the federal government and when an agency enters into invoking eminent domain, it must either show an overriding public benefit or provide compensation for the property subject to a taking. Over the last 100 years, the Supreme Court has created strong guardrails around the takings clause, developing several tests to determine if an imposition on property rights constitutes a taking. While most takings involve a physical taking of property, either real or personal, the court has also ruled that regulations can create takings even when no physical possession by the government occurs<sup>10</sup>. Currently, the courts rely on three tests created by the Supreme Court: the Penn Central<sup>11</sup> balancing test to determine if a taking occurs, the Lucas<sup>12</sup> test to determine if it is a per se taking by economic conditions, and the Loretto<sup>13</sup> test to determine if it is a per se taking by physical occupation. The limited sell-through of products proposed by EPA would meet both the Penn Central and Lucas tests:

- Penn Central Transportation v. New York created a three-part test: "[1] the regulation's economic effect on the [owner], [2] the extent to which the regulation interferes with

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<sup>9</sup> U.S. Const. amend. V

<sup>10</sup> Pennsylvania Coal v. Mahon, 260 U.S. 393 (1922)

<sup>11</sup> Penn Central Transportation Co. v. New York City, 438 U.S. 104 (1978)

<sup>12</sup> Lucas v. South Carolina Coastal Council, 505 U.S. 1003 (1992)

<sup>13</sup> Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. 419 (1982)



reasonable investment-backed expectations, and [3] the character of the government action.”<sup>14</sup>

- The proposed limited sell-through has an economic impact because of dead inventory; wholesale distributors used capital to purchase inventory to sell, which interferes with reasonable investment-backed expectations; and the government action is intentional in its taking of property by rendering the property valueless.
- In *Lucas v. South Carolina Coastal Commission*, the court expanded its definition of a per se taking and established that a regulatory taking could exist when a regulation results in the property becoming valueless.<sup>15</sup>
  - This proposed regulation meets the valueless property test:
    - Property cannot be sold or exported.
    - There is no donation value to training facilities because the equipment has no training value, as no similar equipment can be sold to be installed.
    - It cannot be sold for scrap without first removing the regulated substance, which has a cost likely higher than the scrap value of the property.
    - It has no value in retention, i.e., it is not a piece of art.
      - *Andrus v. Allard*<sup>16</sup>, the court ruled that prohibiting the sale of art containing bald eagle feathers was not a per se taking because there was value in retaining the art to look at or donating it to a museum.

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<sup>14</sup> Quoting *Palazzolo v. Rhode Island*, 533 U.S. 606, 617 (2001)

<sup>15</sup> *Lucas v. South Carolina Coastal Commission* does include putative dictum against its application to personal property; however, this dictum has been overruled by *Horne v. United States Department of Agriculture*, which set personal and real property on equal footing for Fifth Amendment claims

<sup>16</sup> *Andrus v. Allard*, 444 U.S. 51 (1979)

While both Penn Central and Lucas are cases involving real property, i.e., land, the Supreme Court recently ruled in *Horne v. Department of Agriculture*<sup>17</sup> that the Fifth Amendment applies to both real and personal property:

Nothing in the text or history of the Takings Clause, or our precedents, suggests that the rule is any different when it comes to appropriation of personal property.

The government has a categorical duty to pay just compensation when it takes your car, just as when it takes your home.

The Taking Clause provides ‘[N]or shall private property be taken for public use, without just compensation.’ It protects ‘private property’ without any distinction between different types. [citations removed]

Based on *Horne's* injection of personal property into existing real property takings doctrine, the only remaining test is determining if the public benefit outweighs the condemnation. In case law, the public benefit is not measured in monetary amounts but in what the government action is. Luckily a prohibition-era case provides a perfect roadmap for this regulatory action; in *Everard's Breweries v. Day*,<sup>18</sup> the Supreme Court held that the government could enforce a ban on the brewery from selling a pre-existing inventory of intoxicating malt liquors under the 18<sup>th</sup> Amendment's ban on the manufacture, sale, or transportation of intoxicating liquors for beverage purposes, even though Congress created an exception for medically prescribed distilled liquors. The Supreme Court ruled that because the law prohibited the sale of intoxicating liquors for all beverage uses and Congress had only exempted distilled liquors as having a non-beverage use, the government action could condemn the sale for the public benefit. This is the crucial distinction

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<sup>17</sup> *Horne v. Department of Agriculture*, 569 U.S. 513 (2013)

<sup>18</sup> *Everard's Breweries v. Day*, 265 U.S. 545 (1924)

between Everard's Breweries and the proposed rule; the EPA does not prohibit the production and sale of regulated substances; it quite clearly allows the continued production and sale of regulated substances to service existing equipment. The governmental action creating the environmental benefit associated with the AIM Act is not placed within the Technology Transition Rule; it is in the allocation rule that reduces the supply of regulated substances to reduce future releases into the atmosphere. Based on this distinction, the limited sell-through of products containing regulated substances while the regulated substances themselves are still available for sale does not advance the public benefit to overcome the condemnation. Everard's Breweries shows it must be an all-or-nothing approach to evade the takings clause.

Under both the Lucas and Penn Central tests, the proposed prohibition that “no person may sell or distribute, offer to sell or distribute, make available to sell or distribute, purchase or receive, attempt to purchase or receive, or export any product that uses or is intended to use a regulated substance or blend containing a regulated substance” constitutes a regulatory taking and would require the EPA to finalize the regulation with a compensation plan in place. Luckily the courts have established an equitable system for determining compensation: “Fair-market value is further defined as what a willing buyer would pay a willing seller in an arm’s length transaction.”<sup>19</sup> The fair market value for equipment in the HVACR market is well known since it is a commonly sold product.

While the Fifth Amendment does not prohibit regulatory takings, it does place a high bar for the government to do so. As we have seen in many other regulations affecting private property,

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<sup>19</sup> United States v. Miller, 317 U.S. 369, 374-5 (1943).

it is far easier to regulate the property before it exists rather than to cut across the bundle of property rights by restricting the sale, distribution, export, or installation of an existing product.

## **10. Conclusion.**

The Technology Transition Rule will help to ensure a smooth change from high-GWP equipment to future low-GWP alternatives in the United States. While the transition could be achieved through the production and consumption phasedown alone, this rule ensures a level playing field regardless of where equipment is manufactured and if those countries are on a different phasedown timeline in complying with the Kigali Amendment.

HARDI thanks the EPA for soliciting feedback on this important proposed rule; we fully support the technology transition and believe this is a necessary component to the success of the HFC phasedown authorized under the American Innovation and Manufacturing Act.

HARDI looks forward to working with the EPA to ensure future rules look at critical issues that must be addressed, including providing proper certification and training of technicians and contractors, increasing recovery for reclaim, and ensuring a robust reclaim market is available to supply our wholesale distributor members.

Sincerely,



Alex Ayers  
Director of Government Affairs  
Heating, Air-conditioning, & Refrigeration Distributors International

## Appendix A

DOE regulates more than 70 consumer, commercial, industrial, lighting, and plumbing products for energy efficiency and water conservation. Of the 59 products with finalized energy or water conservation standards only Central Air Conditioner Regional Standards uses installation date as the compliance date, while the states not included in the Southeast and Southwest Regions conform to the manufacture date standard used in all other efficiency regulations. DOE has the authority to create additional regional standard regulations for furnaces and heat pumps that would also use installation as the compliance date due to the Energy Independence and Security Act of 2007.

| #                        | Product   | Compliance Date Type  | Current Standard Compliance Date | Next Standard Compliance Date |
|--------------------------|---|-----------------------|----------------------------------|-------------------------------|
| <b>Consumer Products</b> |   |                       |                                  |                               |
| 1.                       | <a href="#">Air Cleaners</a>                            | No Standard Finalized |                                  |                               |
| 2.                       | <a href="#">Battery Chargers</a>                        |                       |                                  |                               |
|                          | Battery Chargers  | Manufacture Date      | June 13, 2018                    |                               |
|                          | Uninterruptible Power Supplies                          | Manufacture Date      | January 10, 2022                 |                               |
| 3.                       | <a href="#">Boilers</a>                                 | Manufacture Date      | January 15, 2021                 |                               |
| 4.                       | <a href="#">Ceiling Fans</a>                            | Manufacture Date      | January 21, 2020                 |                               |
| 5.                       | <a href="#">Central Air Conditioners and Heat Pumps</a> |                       |                                  |                               |
|                          | Base National Standard – Air Conditioners               | Manufacture Date      | January 1, 2023                  |                               |
|                          | Regional Standards – Air Conditioners                   | Installation Date     | January 1, 2023                  |                               |
|                          | Heat Pumps (no regional standard)                       | Manufacture Date      | January 1, 2023                  |                               |
| 6.                       | <a href="#">Clothes Dryers</a>                          | Manufacture Date      | January 1, 2015                  |                               |
| 7.                       | <a href="#">Clothes Washers</a>                         | Manufacture Date      | January 1, 2018                  |                               |
| 8.                       | <a href="#">Computer and Battery Backup Systems</a>     | No Standard Finalized |                                  |                               |
| 9.                       | <a href="#">Conventional Cooking Products</a>           |                       |                                  |                               |
|                          | Gas cooking products with an electrical supply cord     | Manufacture Date      | January 1, 1990                  |                               |
|                          | Gas cooking products without an electrical supply cord  | Manufacture Date      | April 9, 2012                    |                               |
| 10.                      | <a href="#">Dehumidifiers</a>                           | Manufacture Date      | June 13, 2019                    |                               |

| #   | Product   | Compliance Date Type  | Current Standard Compliance Date | Next Standard Compliance Date |
|-----|---|-----------------------|----------------------------------|-------------------------------|
| 11. | <a href="#">Direct Heating Equipment</a>                                | Manufacture Date      | April 16, 2013                   |                               |
| 12. | <a href="#">Dishwashers</a>   | Manufacture Date      | May 30, 2013                     |                               |
| 13. | <a href="#">External Power Supplies</a>                                 | Manufacture Date      | February 10, 2016                |                               |
| 14. | <a href="#">Furnace Fans</a>  | Manufacture Date      | July 3, 2019                     |                               |
| 15. | <a href="#">Furnaces</a>  |                       |                                  |                               |
|     | Non-weatherized gas furnaces (not including mobile home furnaces)       | Manufacture Date      | November 19, 2015                |                               |
|     | Mobile Home gas furnaces  | Manufacture Date      | November 19, 2015                |                               |
|     | Non-weatherized oil-fired furnaces (not including mobile home furnaces) | Manufacture Date      | May 1, 2013                      |                               |
|     | Mobile Home oil-fired furnaces  | Manufacture Date      | May 1, 2013                      |                               |
|     | Weatherized gas furnaces  | Manufacture Date      | January 1, 2015                  |                               |
|     | Weatherized oil-fired furnaces  | Manufacture Date      | January 1, 1992                  |                               |
|     | Electric furnaces   | Manufacture Date      | May 1, 2013                      |                               |
| 16. | <a href="#">Hearth Products</a>   | No Standard Finalized |                                  |                               |
| 17. | <a href="#">Manufactured Housing</a>                                    | No Standard Finalized |                                  |                               |
| 18. | <a href="#">Microwave Ovens</a>   | Manufacture Date      | June 17, 2016                    |                               |
| 19. | <a href="#">Miscellaneous Refrigeration</a>                             | Manufacture Date      | October 28, 2019                 |                               |
| 20. | <a href="#">Pool Heaters</a>  | Manufacture Date      | April 16, 2013                   |                               |
| 21. | <a href="#">Portable Air Conditioners</a>                               | Manufacture Date      | N/A                              | January 10, 2025              |
| 22. | <a href="#">Refrigerators and Freezers</a>                              | Manufacture Date      | September 15, 2014               |                               |
| 23. | <a href="#">Room Air Conditioners</a>                                   | Manufacture Date      | June 1, 2014                     |                               |
| 24. | <a href="#">Set-Top Boxes</a>   | No Standard Finalized |                                  |                               |
| 25. | <a href="#">Televisions</a>   | No Standard Finalized |                                  |                               |
| 26. | <a href="#">Water Heaters</a>   | Manufacture Date      | April 16, 2015                   |                               |

| #                                  | Product  | Compliance Date Type  | Current Standard Compliance Date | Next Standard Compliance Date |
|------------------------------------|--|-----------------------|----------------------------------|-------------------------------|
| Commercial and Industrial Products |  |                       |                                  |                               |
| 27.                                | <a href="#">Air-Cooled Unitary Air Conditioners and Heat Pumps</a>   |                       |                                  |                               |
|                                    | Small Commercial Packaged Air Conditioning and Heating Equipment (Air-Cooled)  | Manufacture Date      | January 1, 2023                  |                               |
|                                    | Large Commercial Packaged Air Conditioning and Heating Equipment (Air-Cooled)  | Manufacture Date      | January 1, 2023                  |                               |
|                                    | Very Large Commercial Packaged Air Conditioning and Heating Equipment (Air-Cooled)                                   | Manufacture Date      | January 1, 2023                  |                               |
|                                    | Small Commercial Package Air-Conditioning and Heating Equipment (Air-Cooled, 3-Phase, Split-System): Air Conditioner | Manufacture Date      | June 16, 2008                    |                               |
|                                    | Small Commercial Package Air-Conditioning and Heating Equipment (Air-Cooled, 3-Phase, Split-System): Heat Pump       | Manufacture Date      | January 1, 2017                  |                               |
|                                    | Small Commercial Package Air-Conditioning and Heating Equipment (Air-Cooled, 3-Phase, Single-Package): All Types     | Manufacture Date      | January 1, 2017                  |                               |
|                                    | Small Double-Duct Commercial Packaged Air Conditioning and Heating Equipment (Air-Cooled)                            | Manufacture Date      | January 1, 2010                  |                               |
|                                    | Large Double-Duct Commercial Packaged Air Conditioning and Heating Equipment (Air-Cooled)                            | Manufacture Date      | January 1, 2010                  |                               |
|                                    | Very Large Double-Duct Commercial Packaged Air Conditioning and Heating Equipment (Air-Cooled)                       | Manufacture Date      | January 1, 2010                  |                               |
| 28.                                | <a href="#">Automatic Commercial Ice Makers</a>  | Manufacture Date      | January 28, 2018                 |                               |
| 29.                                | <a href="#">Circulator Pumps</a>   | No Standard Finalized |                                  |                               |
| 30.                                | <a href="#">Clothes Washers</a>  | Manufacture Date      | January 1, 2018                  |                               |
| 31.                                | <a href="#">Commercial Packaged Boilers</a>  | Manufacture Date      | January 10, 2023                 |                               |
| 32.                                | <a href="#">Commercial and Industrial Air Compressors</a>  | Manufacture Date      | N/A                              | January 10, 2025              |
| 33.                                | <a href="#">Computer Room Air Conditioners</a>   |                       |                                  |                               |

| # | Product   | Compliance Date Type | Current Standard Compliance Date | Next Standard Compliance Date |
|---|---|----------------------|----------------------------------|-------------------------------|
|   | Computer Room Air Conditioners, Air-Cooled: <65,000 Btu/h   | Manufacture Date     | October 29, 2012                 |                               |
|   | Computer Room Air Conditioners, Air-Cooled: ≥65,000 Btu/h and <240,000 Btu/h                            | Manufacture Date     | October 29, 2013                 |                               |
|   | Computer Room Air Conditioners, Air-Cooled: ≥240,000 Btu/h and <760,000 Btu/h                           | Manufacture Date     | October 29, 2013                 |                               |
|   | Computer Room Air Conditioners, Water-Cooled: <65,000 Btu/h   | Manufacture Date     | October 29, 2012                 |                               |
|   | Computer Room Air Conditioners, Water-Cooled: ≥65,000 Btu/h and <240,000 Btu/h                          | Manufacture Date     | October 29, 2013                 |                               |
|   | Computer Room Air Conditioners, Water-Cooled: ≥240,000 Btu/h and <760,000 Btu/h                         | Manufacture Date     | October 29, 2013                 |                               |
|   | Computer Room Air Conditioners, Water-Cooled with a Fluid Economizer: <65,000 Btu/h                     | Manufacture Date     | October 29, 2012                 |                               |
|   | Computer Room Air Conditioners, Water-Cooled with a Fluid Economizer: ≥65,000 Btu/h and <240,000 Btu/h  | Manufacture Date     | October 29, 2013                 |                               |
|   | Computer Room Air Conditioners, Water-Cooled with a Fluid Economizer: ≥240,000 Btu/h and <760,000 Btu/h | Manufacture Date     | October 29, 2013                 |                               |
|   | Computer Room Air Conditioners, Glycol-Cooled: <65,000 Btu/h  | Manufacture Date     | October 29, 2012                 |                               |
|   | Computer Room Air Conditioners, Glycol-Cooled: ≥65,000 Btu/h and <240,000 Btu/h                         | Manufacture Date     | October 29, 2013                 |                               |
|   | Computer Room Air Conditioners, Glycol-Cooled: ≥240,000 Btu/h and <760,000 Btu/h                        | Manufacture Date     | October 29, 2013                 |                               |
|   | Computer Room Air Conditioner, Glycol-Cooled with a Fluid Economizer: <65,000 Btu/h                     | Manufacture Date     | October 29, 2012                 |                               |
|   | Computer Room Air Conditioner, Glycol-Cooled with a Fluid Economizer: ≥65,000 Btu/h and <240,000 Btu/h  | Manufacture Date     | October 29, 2013                 |                               |



| #   | Product   | Compliance Date Type  | Current Standard Compliance Date | Next Standard Compliance Date |
|-----|---|-----------------------|----------------------------------|-------------------------------|
|     | Computer Room Air Conditioner, Glycol-Cooled with a Fluid Economizer: $\geq 240,000$ Btu/h and $< 760,000$ Btu/h                  | Manufacture Date      | October 29, 2013                 |                               |
| 34. | <a href="#">Dedicated Outdoor Air Systems</a>   | No Standard Finalized |                                  |                               |
| 35. | <a href="#">Dedicated-Purpose Pool Pumps</a>  | Manufacture Date      | July 19, 2021                    |                               |
| 36. | <a href="#">Distribution Transformers</a>   | Manufacture Date      | January 1, 2016                  |                               |
| 37. | <a href="#">Electric Motors</a>   | Manufacture Date      | June 1, 2016                     |                               |
| 38. | <a href="#">Evaporatively-Cooled Unitary Air Conditioners</a>   |                       |                                  |                               |
|     | Small Commercial Package Air-Conditioning and Heating Equipment (Evaporatively-Cooled): $< 65,000$ Btu/h                          | Manufacture Date      | October 29, 2003                 |                               |
|     | Small Commercial Package Air-Conditioning and Heating Equipment (Evaporatively-Cooled): $\geq 65,000$ Btu/h and $< 135,000$ Btu/h | Manufacture Date      | June 1, 2013                     |                               |
|     | Large Commercial Package Air-Conditioning and Heating Equipment (Evaporatively-Cooled)  | Manufacture Date      | June 1, 2014                     |                               |
|     | Very Large Commercial Package Air Conditioning and Heating Equipment (Evaporatively-Cooled)                                       | Manufacture Date      | June 1, 2014                     |                               |
| 39. | <a href="#">Fans and Blowers</a>  | No Standard Finalized |                                  |                               |
| 40. | <a href="#">Packaged Terminal Air Conditioners and Heat Pumps</a>   |                       |                                  |                               |
|     | PTAC: Standard Size   | Manufacture Date      | January 1, 2017                  |                               |
|     | PTAC: Non-Standard Size   | Manufacture Date      | October 7, 2010                  |                               |
|     | PTHP: Standard Size   | Manufacture Date      | October 8, 2012                  |                               |
|     | PTHP: Non-Standard Size   | Manufacture Date      | October 7, 2010                  |                               |
| 41. | <a href="#">Pumps</a>   | Manufacture Date      | January 27, 2020                 |                               |
| 42. | <a href="#">Refrigerated Beverage Vending Machines</a>  | Manufacture Date      | January 8, 2019                  |                               |
| 43. | <a href="#">Refrigeration Equipment</a>   | Manufacture Date      | March 27, 2017                   |                               |
| 44. | <a href="#">Single Package Vertical Air Conditioners and Heat Pumps</a>   |                       |                                  |                               |

| #   | Product   | Compliance Date Type | Current Standard Compliance Date | Next Standard Compliance Date |
|-----|---|----------------------|----------------------------------|-------------------------------|
|     | Single package vertical air conditioners and single package vertical heat pumps, single-phase and three-phase     | Manufacture Date     | September 23, 2019               |                               |
|     | Single package vertical air conditioners and single package vertical heat pumps                                   | Manufacture Date     | October 9, 2015                  |                               |
|     | Single package vertical air conditioners and single package vertical heat pumps                                   | Manufacture Date     | October 9, 2016                  |                               |
| 45. | <a href="#">Small Electric Motors</a>   |                      |                                  |                               |
|     | Small electric motor  | Manufacture Date     | March 9, 2015                    |                               |
|     | Small electric motor which requires listing or certification by a nationally recognized safety testing laboratory | Manufacture Date     | March 9, 2017                    |                               |
| 46. | <a href="#">Unit Heaters</a>  |                      |                                  |                               |
|     |   | Manufacture Date     | August 8, 2008                   |                               |
| 47. | <a href="#">Variable Refrigerant Flow Air Conditioners and Heat Pumps</a>   |                      |                                  |                               |
|     | VRF Multi-Split Air Conditioners (Air-Cooled): <65,000 Btu/h  | Manufacture Date     | June 16, 2008                    |                               |
|     | VRF Multi-Split Air Conditioners (Air-Cooled): ≥65,000 Btu/h and <135,000 Btu/h                                   | Manufacture Date     | January 1, 2010                  |                               |
|     | VRF Multi-Split Air Conditioners (Air-Cooled): ≥135,000 Btu/h and <240,000 Btu/h                                  | Manufacture Date     | January 1, 2010                  |                               |
|     | VRF Multi-Split Air Conditioners (Air-Cooled): ≥240,000 Btu/h and <760,000 Btu/h                                  | Manufacture Date     | January 1, 2010                  |                               |
|     | VRF Multi-Split Heat Pumps (Air-Cooled): <65,000 Btu/h  | Manufacture Date     | June 16, 2008                    |                               |
|     | VRF Multi-Split Heat Pumps (Air-Cooled): ≥65,000 Btu/h and <135,000 Btu/h   | Manufacture Date     | January 1, 2010                  |                               |
|     | VRF Multi-Split Heat Pumps (Air-Cooled): ≥135,000 Btu/h and <240,000 Btu/h  | Manufacture Date     | January 1, 2010                  |                               |
|     | VRF Multi-Split Heat Pumps (Air-Cooled): ≥240,000 Btu/h and <760,000 Btu/h  | Manufacture Date     | January 1, 2010                  |                               |

| #                 | Product  | Compliance Date Type | Current Standard Compliance Date | Next Standard Compliance Date |
|-------------------|--|----------------------|----------------------------------|-------------------------------|
|                   | VRF Multi-Split Heat Pumps<br>(Water-Source): <65,000 Btu/h  | Manufacture Date     | June 16, 2008                    |                               |
|                   | VRF Multi-Split Heat Pumps<br>(Water-Source): ≥65,000 Btu/h and <135,000 Btu/h   | Manufacture Date     | January 1, 2010                  |                               |
|                   | VRF Multi-Split Heat Pumps<br>(Water-Source): ≥135,000 Btu/h and <240,000 Btu/h  | Manufacture Date     | January 1, 2010                  |                               |
|                   | VRF Multi-Split Heat Pumps<br>(Water-Source): ≥240,000 Btu/h and <760,000 Btu/h  | Manufacture Date     | January 1, 2010                  |                               |
| 48.               | <a href="#">Walk-In Coolers and Walk-In Freezers</a>   | Manufacture Date     | June 5, 2017                     |                               |
| 49.               | <a href="#">Warm Air Furnaces</a>  | Manufacture Date     | January 1, 2023                  |                               |
| 50.               | <a href="#">Water-Cooled Unitary Air Conditioners</a>  |                      |                                  |                               |
|                   | Small Commercial Package Air Conditioning and Heating Equipment (Water-Cooled): <65,000 Btu/h                          | Manufacture Date     | October 29, 2003                 |                               |
|                   | Small Commercial Package Air Conditioning and Heating Equipment (Water-Cooled): ≥65,000 Btu/h and <135,000 Btu/h       | Manufacture Date     | June 1, 2013                     |                               |
|                   | Large Commercial Package Air-Conditioning and Heating Equipment (Water-Cooled): ≥135,000 Btu/h and <240,000 Btu/h      | Manufacture Date     | June 1, 2014                     |                               |
|                   | Very Large Commercial Package Air-Conditioning and Heating Equipment (Water-Cooled): ≥240,000 Btu/h and <760,000 Btu/h | Manufacture Date     | June 1, 2014                     |                               |
| 51.               | <a href="#">Water Heating Equipment</a>  | Manufacture Date     | October 21, 2005                 |                               |
| 52.               | <a href="#">Water-Source Heat Pumps</a>  |                      |                                  |                               |
|                   | Small Commercial Packaged Air-Conditioning and Heating Equipment (Water Source: Water-to-Air, Water-Loop)              | Manufacture Date     | October 9, 2015                  |                               |
| Lighting Products |  |                      |                                  |                               |
| 53.               | <a href="#">Ceiling Fan Light Kits</a>   | Manufacture Date     | January 21, 2020                 |                               |

| #                 | Product   | Compliance Date Type  | Current Standard Compliance Date | Next Standard Compliance Date |
|-------------------|---|-----------------------|----------------------------------|-------------------------------|
| 54.               | <a href="#">Certain Lamps</a>                                 | No Standard Finalized |                                  |                               |
| 55.               | <a href="#">Compact Fluorescent Lamps</a>                     | Manufacture Date      | September 15, 2014               |                               |
| 56.               | <a href="#">Fluorescent Lamp Ballasts</a>                     | Manufacture Date      | November 14, 2014                |                               |
| 57.               | <a href="#">General Service Fluorescent Lamps</a>             | Manufacture Date      | January 26, 2018                 |                               |
| 58.               | <a href="#">General Service Incandescent Lamps</a>            |                       |                                  |                               |
|                   | Rated lumen range: 1490-2600                                  | Manufacture Date      | January 1, 2012                  |                               |
|                   | Rated lumen range: 1050-1489                                  | Manufacture Date      | January 1, 2013                  |                               |
|                   | Rated lumen range: 750-1049                                   | Manufacture Date      | January 1, 2014                  |                               |
|                   | Rated lumen range: 310-749                                    | Manufacture Date      | January 1, 2014                  |                               |
| 59.               | <a href="#">General Service Lamps</a>                         | No Standard Finalized |                                  |                               |
| 60.               | <a href="#">High-Intensity Discharge Lamps</a>                | No Standard Finalized |                                  |                               |
| 61.               | <a href="#">Illuminated Exit Signs</a>                        | Manufacture Date      | January 1, 2006                  |                               |
| 62.               | <a href="#">Incandescent Reflector Lamps</a>                  | Manufacture Date      | July 14, 2012                    |                               |
| 63.               | <a href="#">Light Emitting Diode Lamps</a>                    | No Standard Finalized |                                  |                               |
| 64.               | <a href="#">Luminaires</a>                                    | No Standard Finalized |                                  |                               |
| 65.               | <a href="#">Metal Halide Lamp Fixtures</a>                    | Manufacture Date      | February 10, 2017                |                               |
| 66.               | <a href="#">Torchieres</a>                                    | Manufacture Date      | January 1, 2006                  |                               |
| 67.               | <a href="#">Traffic Signal Modules and Pedestrian Modules</a> | Manufacture Date      | January 1, 2006                  |                               |
| Plumbing Products |   |                       |                                  |                               |
| 68.               | <a href="#">Commercial Prerinse Spray Valves</a>              | Manufacture Date      | January 28, 2019                 |                               |
| 69.               | <a href="#">Faucets</a>                                       | Manufacture Date      | January 1, 1994                  |                               |
| 70.               | <a href="#">Showerheads</a>                                   | Manufacture Date      | January 1, 1994                  |                               |
| 71.               | <a href="#">Urinals</a>                                       | Manufacture Date      | January 1, 1994                  |                               |
| 72.               | <a href="#">Water Closets (Flush Toilets)</a>                 | Manufacture Date      | January 1, 1994                  |                               |

Source: <https://www.energy.gov/eere/buildings/standards-and-test-procedures>