SUPPLEMENTARY INFORMATION: Under the Montreal Protocol on Substances that Deplete the Ozone Layer (Protocol), as amended, the U.S. and other industrialized countries that are Parties to the Protocol have agreed to limit production and consumption of hydrochlorofluorocarbons (HCFCs) and to phase out consumption in a step-wise fashion over time, culminating in a complete phaseout in 2030. Title VI of the Clean Air Act Amendments of 1990 (CAAA) authorizes EPA to promulgate regulations to manage the consumption and production of HCFCs until the total phaseout in 2030. EPA promulgated final regulations establishing an allowance tracking system for HCFCs on January 21, 2003 (68 FR 8280). These regulations were amended on June 17, 2004 (69 FR 34024) and July 20, 2006 (71 FR 41163). This action establishes a ban on sale or distribution in interstate commerce of air-conditioning and refrigeration appliances, as well as appliance components that are pre-charged with HCFC–22, HCFC–142b, or blends containing one or both of these controlled substances as the refrigerant. These prohibitions apply only to appliances and components manufactured on or after January 1, 2010. Schedule of Appliances and Components

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I. General Information

A. Does This Action Apply to Me?

This final rule will affect the following categories:

<table>
<thead>
<tr>
<th>Category</th>
<th>NAICS code</th>
<th>SIC code</th>
<th>Examples of regulated entities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractors and Servicing</td>
<td>238220</td>
<td>1711, 7623</td>
<td>Plumbing, Heating, and Air-Conditioning Contractors.</td>
</tr>
<tr>
<td>Manufacturers of air conditioners and refrigerators</td>
<td>333415</td>
<td>3585</td>
<td>Air-Conditioning Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing.</td>
</tr>
<tr>
<td>Air-Conditioning Equipment and Supplies Merchant Wholesalers</td>
<td>423730</td>
<td>5075</td>
<td>Air-conditioning (condensing unit, compressors) merchant wholesalers.</td>
</tr>
<tr>
<td>Electrical and Electronic Appliance, Television, and Radio Set Merchant Wholesalers</td>
<td>423620</td>
<td>5064</td>
<td>Air-conditioning (room units) merchant wholesalers.</td>
</tr>
<tr>
<td>Importers of air conditioners and refrigerators</td>
<td>333415</td>
<td>3585</td>
<td>Air-Conditioning Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing.</td>
</tr>
</tbody>
</table>

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. This table lists the types of entities that EPA is now aware potentially could be regulated by this action. Other types of entities not listed in this table could also be affected. To determine whether your facility, company, business organization, or other entity is regulated by this action, you should carefully examine these regulations. If you have questions regarding the applicability of this action to a particular entity, consult the person listed in the FOR FURTHER INFORMATION CONTACT section.

B. Background

In 1973 chemists Frank Sherwood Rowland and Mario Molina at the University of California-Irvine began studying the impacts of chlorofluorocarbons (CFCs) in the earth’s atmosphere. They discovered that CFC molecules were stable enough to migrate to the stratosphere and that the chlorine atoms contained in these molecules could cause the breakdown of large amounts of ozone in the stratosphere. The Toxic Substances Control Act (TSCA), passed in 1976, included regulatory authority over CFCs. EPA’s first regulatory response to concerns for stratospheric ozone protection resulted in a ban on CFC aerosol propellants (43 FR 11301; March 17, 1978 and 43 FR 11318; March 17, 1978).

EPA followed this initial regulatory approach with an Advance Notice of Proposed Rulemaking (ANPRM) which discussed a freeze on the production of certain CFCs and a system of marketable permits to allocate CFC consumption among industries (45 FR 66726; October 7, 1980). EPA did not act immediately on the 1980 ANPRM and was subsequently sued by the Natural Resources Defense Council (NRDC v. Thomas, No. 84–3587 (D.D.C.)) for failure to regulate CFCs further. EPA and NRDC settled the case and agreed that EPA would propose further regulatory controls on CFCs, or state the reasons for deciding not to issue a proposal, by December 1, 1987, and would take final action by August 1, 1988.

On January 10, 1986 (51 FR 1257), EPA published its Stratospheric Ozone Protection Plan. That plan described the analytic basis for supporting negotiations for an international agreement to control CFCs and for reassessing the need for additional domestic regulations of CFCs and other ozone-depleting substances (ODS). The United States participated in negotiations organized by the United Nations Environment Programme (UNEP) to develop an international agreement to protect stratospheric ozone. These negotiations, preceded by the 1985 signing of the Vienna Convention, resulted in the signing of the Montreal Protocol in 1987. The United States ratified the Montreal Protocol on April 21, 1988. In 1988, EPA promulgated regulations implementing the requirements of the Montreal Protocol through a system of tradable allowances under section 157(b) of the Clean Air Act as amended in 1977. This section was subsequently modified by the 1990 Amendments and became CAA § 615. The Senate Report on the 1990 Amendments, Senate Rep. No. 101–228: “Authority of the Administrator” notes that this section “is intended * * * to preserve the authority and responsibility of the Administrator as set forth in section 157 of the existing Clean Air Act,” although the Conference report to the 1990 CAAA is silent on this matter.

Since the CAAA were passed in 1990, EPA has promulgated regulations based on various provisions of Title VI. For example, EPA has promulgated a production and consumption phaseout schedule that included a revised trading regime for class I ODS, a production and consumption phaseout schedule and trading regime for class II ODS, servicing requirements for air-conditioning and refrigeration appliances, bans on nonessential products containing or manufactured with ODS, and labeling requirements.

Concern for ozone layer protection remains paramount for the global community. In an effort to further protect human health and the environment, the Parties to the Montreal Protocol adjusted the Montreal Protocol’s phaseout schedule for HCFCs in September 2007. The Parties agreed that industrialized countries, including the United States, would reduce production and consumption of HCFCs to 75 percent below the established baseline in 2010, to 90 percent below the established baseline in 2015, and to 99.5 percent in 2020—allowing for only 0.5 percent production and consumption between 2020–2030 to be used solely for servicing existing appliances culminating in the terminal phaseout in 2030. In addition, the Parties adjusted the schedule for non-industrialized countries by agreeing to set production and consumption baselines based on the average values for 2009–2010 production and consumption, respectively; to freeze production and consumption in 2013; and to add stepwise reductions as follows: 10 percent below baselines in 2015, 35 percent below in 2020, 67.5 percent below in 2025 and allowing for a servicing tail to average no more than 2.5 percent between 2030–2040 to be used solely for servicing existing appliances, culminating in the terminal phaseout in 2040.

The requirements already established at 40 CFR 82.16(c) make it unlawful to produce or import HCFC–22 or HCFC–142b on or after January 1, 2010, for use...
in refrigeration or air-conditioning appliances manufactured on or after that date. The practical result of this provision is that effective January 1, 2010, domestic manufacturers of air-conditioning and refrigeration appliances will not be able to charge newly manufactured appliances with newly produced or imported HCFC–22 or HCFC–142b, and thus will not be introducing new appliances containing these substances into interstate commerce.

II. Final Action

EPA is establishing regulations that ban the sale or distribution or offer for sale or distribution in interstate commerce of all air-conditioning and refrigeration appliances containing HCFC–22, HCFC–142b, or blends containing one or both of these controlled substances, beginning January 1, 2010. The prohibition includes fully assembled appliances that are sold pre-charged with HCFC–22 or HCFC–142b (such as window air-conditioning units), as well as appliances that are field assembled with HCFC–22 or HCFC–142b (such as residential split systems and supermarket refrigeration equipment). This prohibition extends to imported appliances as well as U.S. manufactured appliances that are destined for export. EPA is also banning the sale or distribution in interstate commerce of appliance components that are pre-charged with HCFC–22 or HCFC–142b beginning January 1, 2010. The prohibitions do not apply to pre-charged appliances or pre-charged appliance components that are manufactured prior to January 1, 2010. Pre-charged appliances and components that have been manufactured prior to January 1, 2010 may be sold and distributed in interstate commerce.

Refrigeration and air-conditioning end-uses typically use a refrigerant in a vapor compression cycle to cool and/or dehumidify a substance or space, like a refrigerator cabinet, room, office building, or warehouse. HCFC–22 is a popular refrigerant that is commonly used in a variety of refrigeration and air-conditioning equipment including industrial and residential applications, most of which are field installed and charged on-site. HCFC–22 can be used in a large range of equipment including:

Residential Uses

- Window air-conditioning units.
- Dehumidifiers.
- Central air conditioners.
- Air-to-air heat pumps.
- Ground-source heat pumps.
- Ductless air conditioners.
- Chest or upright freezers.

Commercial and Industrial Uses

- Packaged air conditioners and heat pumps.
- Chillers.
- Retail food refrigeration.
- Cold storage warehouses.
- Industrial process refrigeration.
- Refrigerated transport.
- Public transport (e.g., buses, trains, subway air-conditioning).

HCFC–22 is often used as a component in refrigerant blends that contain several chemical compounds. HCFC–22 refrigerant blends are used in various industrial, commercial, and residential end uses including: Retail food refrigeration, cold storage warehouses, industrial process refrigeration (IPR), and transport refrigeration appliances. As a refrigerant, HCFC–142b is rarely used by itself; it is generally a component of a refrigerant blend. For example, R–401A (Suva MP39), R–406A (Autofrost GHG–X3), R–414B (Hot Shot®), Freeze-12TM are all refrigerant blends containing HCFC–22 and/or HCFC–142b.

Readers interested in substitutes for ODS refrigerants should review the Significant New Alternatives Policy (SNAP) program which evaluates and determines whether a substitute for an ODS in a specific end-use may be used safely in comparison to other available substitutes. Section 612 authorizes EPA to identify and publish lists of acceptable and unacceptable substitutes for class I or class II ozone-depleting substances. EPA has determined that a large number of alternatives are acceptable because they provide limited risk to human health and the environment. The purpose of SNAP is to allow a safe, smooth transition away from ODS by identifying as acceptable substitutes that provide significantly greater risk than other substances that are available. Additional information concerning substitutes specifically for air-conditioning and refrigeration applications can be found at: http://www.epa.gov/ozone/snap/refrigerants/index.html.

This final rule does not restrict or prohibit the sale of appliances containing HCFC–22 or HCFC–142b as blowing agents in closed cell insulation foam. However, EPA has promulgated SNAP Rule 13: The use of HCFC–22 and HCFC–142b in foams/listing of ozone depleting substitutes in foam blowing (72 FR 14432), finding HCFC–22 and HCFC–142b as unacceptable substitutes for HCFC–141b in the manufacture of commercial refrigeration, sandwich panels, slabstock, and other "pour foam" applications.

This final rule does not affect the servicing of air-conditioning or refrigeration appliances manufactured prior to January 1, 2010. Servicing is regulated under other authorities, notably 40 CFR part 82 subpart F (i.e., section 608 regulations). Service and repair of existing equipment using HCFC–22 or HCFC–142b is not affected by this final rule. EPA believes it is necessary to continue to permit the servicing of air-conditioning and refrigeration appliances manufactured prior to January 1, 2010, to ensure a smooth transition to non-ODS alternatives.

This final rule prohibits the sale or distribution, and the offer for sale or distribution, in interstate commerce of air-conditioning and refrigeration appliances and their components containing HCFC–22 or HCFC–142b beginning January 1, 2010. The ban applies to appliances and components manufactured on or after January 1, 2010, but not to appliances or components manufactured before that date. This final rule, combined with the accompanying final rule titled “Protection of Stratospheric Ozone: Adjustments to the Allowance System for Controlling HCFC Production, Import, and Export” (EPA Docket: EPA–HQ–OAR–2006–0496) published elsewhere in this issue of the Federal Register, which we refer to below as the “allocation rulemaking,” will have the following effects on the sale, distribution, and installation of air-conditioning and refrigeration products charged with HCFC–22 or HCFC–142b.

- Sale and distribution of appliances pre-charged with HCFC–22 or HCFC–142b is allowed for self-contained, factory-charged appliances such as pre-charged window units, packaged terminal air conditioners (PTACs), and some commercial refrigeration units, if manufactured before January 1, 2010. The pre-charged appliance rule does not prohibit sale and distribution of pre-2010 inventory (i.e., stockpiled inventories).
- Sale and distribution of appliances pre-charged with HCFC–22 or HCFC–142b is not allowed for self-contained, factory-charged appliances such as pre-charged window units, packaged terminal air conditioners (PTACs), and some commercial refrigeration units, if

1 Throughout this action, where EPA refers to HCFC–22 or HCFC–142b, it also refers to blends containing one or both of those HCFCs.
manufactured on or after January 1, 2010. This prohibition, which is contained in the pre-charged appliance rule, applies regardless of when the refrigerant was produced and whether it is virgin or reclaimed. Under the allocation rule, neither stockpiled HCFC–22 produced prior to January 1, 2010, nor new HCFC–22 produced after that date can be used to manufacture new appliances on or after January 1, 2010.

- Sale and distribution of appliance components pre-charged with HCFC–22 or HCFC–142b is allowed if the components (e.g., condensing units, line sets, and coils that are charged with refrigerant) were manufactured before January 1, 2010. The pre-charged appliance rule does not prohibit sale and distribution of pre-2010 inventory (i.e., stockpiled inventories).
- Pre-charged appliance components manufactured before January 1, 2010 may be used to service appliances manufactured before January 1, 2010, but may not be enabled to create new appliances unless there is no use of virgin HCFC–22 or HCFC–142b, in the components or otherwise. The allocation rule prohibits use of virgin HCFC–22 and HCFC–142b in manufacturing new appliances.
- There is no exemption from the pre-charged appliance rule for the sale or distribution of pre-charged appliances and pre-charged components that are charged with reclaimed HCFC–22 or HCFC–142b refrigerant. In other words, the provisions banning sale and distribution apply equally regardless of whether the appliances or components contain virgin or reclaimed refrigerant.
- Under the allocation rule, virgin HCFC–22 and HCFC–142b may only be used to service existing appliances. Virgin HCFC–22 and HCFC–142b may not be used to manufacture new pre-charged appliances or appliance components. Virgin HCFC–22 and HCFC–142b also may not be used to charge new appliances assembled onsite on or after January 1, 2010, though new appliances (not pre-charged) may be charged with reclaimed refrigerant.
- EPA is providing an exception to the allocation rule that allows virgin HCFC–22 to be used in the onsite “manufacture” of appliances for a particular project between January 1, 2010, and December 31, 2011, if the components have been specified for use at that project under a building permit or contract dated before January 1, 2010.
- Under the allocation rule, HCFC–22 produced prior to January 1, 2010, may be used until January 1, 2015, for the manufacture of thermostatic expansion valves (TXVs).
- The sale and distribution of used appliances is not affected by either rule.

A. Establishing 40 CFR Part 82, Subpart I

Today’s final rule prohibits the sale and distribution of used appliances and appliance components in interstate commerce in a new subpart I to 40 CFR part 82. The new subpart is titled Ban on Refrigeration and Air-Conditioning Appliances Containing HCFCs. A new subpart is warranted since existing subparts dealing with the phaseout of production and consumption of controlled substances generally apply to bulk substances and not finished goods.

As discussed in the NPRM, EPA considered amending subpart C, since that subpart includes a ban on the sale and distribution of certain products manufactured with or containing HCFCs, as well as air-conditioning and refrigeration appliances containing CFCs as the refrigerant, but those provisions were promulgated under CAA section 610. Given that EPA is using different authority for these provisions and is structuring them somewhat differently, EPA finds that for ease of reference, new provisions should be housed in a new and easily identifiable subpart in the CFR.

B. Authority To Prohibit Sale or Distribution, or Offer for Sale or Distribution, of Specific Types of Appliances

EPA proposed to establish regulations under authority of section 615 of the Act, to take effect January 1, 2010, that would ban the sale or distribution of air-conditioning and refrigeration appliances and components containing HCFC–22 or HCFC–142b, as well as air-conditioning and refrigeration appliances suitable for use solely with newly produced HCFC–22 or HCFC–142b may reasonably be anticipated to affect ozone in the stratosphere, and such effect may reasonably be anticipated to endanger public health or welfare, then the Administrator must promptly promulgate regulations respecting the control of such substances, practice, process, or activity.

EPA proposed to conclude that, beginning January 1, 2010, the practice of selling and distributing pre-charged air-conditioning and refrigeration appliances and pre-charged appliance components containing HCFC–22 or HCFC–142b, as well as air-conditioning and refrigeration appliances suitable for use solely with newly produced HCFC–22 or HCFC–142b may reasonably be anticipated to affect ozone in the stratosphere, and such effect may reasonably be anticipated to endanger public health.

Under section 615, if in the Administrator’s judgment, any substance, practice, process, or activity may reasonably be anticipated to endanger the stratosphere, especially ozone in the stratosphere, and such effect may reasonably be anticipated to endanger public health or welfare, then the Administrator must promptly promulgate regulations respecting the control of such substance, practice, process, or activity.

For the reasons discussed below, EPA has determined that the practice of selling and distributing pre-charged air-conditioning and refrigeration appliances and components containing HCFC–22 or HCFC–142b may reasonably be anticipated to affect ozone in the stratosphere, and such effect may reasonably be anticipated to endanger public health or welfare, then the Administrator shall promptly promulgate regulations respecting the control of such substance, practice, process, or activity, and shall submit notice of the proposal and promulgation of such regulation to the Congress.

EPA proposed to ban effective January 1, 2010, the sale or distribution of or offer for sale or distribution in interstate commerce of all air-conditioning and refrigeration appliances and components containing HCFC–22 or HCFC–142b containing one or both of these controlled substances. EPA also proposed to ban effective January 1, 2010, the sale or distribution or offer for sale or distribution in interstate commerce of all air-conditioning and refrigeration appliances suitable for use solely with newly produced HCFC–22 or HCFC–142b.

Section 301(a) authorizes EPA to promulgate regulations as are necessary to carry out its functions under the Clean Air Act, such as issuing prohibitions and standards. Further, section 615 of the CAA states that:

If, in the Administrator’s judgment, any substance, practice, process, or activity may reasonably be anticipated to affect the stratosphere, especially ozone in the stratosphere, and such effect may reasonably be anticipated to endanger public health or welfare, the Administrator shall promptly promulgate regulations respecting the control of such substance, practice, process, or activity, and shall submit notice of the proposal and promulgation of such regulation to the Congress.

For the reasons discussed below, EPA has determined that the practice of selling and distributing pre-charged air-conditioning and refrigeration appliances and components containing HCFC–22 or HCFC–142b may reasonably be anticipated to affect ozone in the stratosphere, and such effect may reasonably be anticipated to endanger public health or welfare, then the Administrator shall promptly promulgate regulations respecting the control of such substance, practice, process, or activity.
Three commenters stated that EPA must ensure that its findings regarding public health are well supported, documented in the record, and clearly meet the statutory criteria for an endangerment finding, under section 615. These commenters did not find EPA’s finding to be well supported and instead said it was based on general assumptions, incomplete analyses, and extrapolations of calculations made by one consultant in one brief analysis. Other commenters found that the Agency’s approach is an appropriate exercise of section 615 authority as it would fill a regulatory gap and is well-tailored to the section 615 endangerment finding.

After considering the comments, EPA is finalizing its proposed conclusion that the practice of selling and distributing air-conditioning and refrigeration appliances containing HCFC–22 or HCFC–142b may reasonably be anticipated to affect ozone in the stratosphere, and that such effect may reasonably be anticipated to endanger public health. Specific concerns raised by commenters regarding the “Draft Memorandum on Costs Associated with Refrigerant Substitution from R–22 to R–410A in Pre-Charged Equipment Imports” and the basis for estimates used in that document are discussed in the response to comments document available in the docket.

In reaching our conclusion, we considered both of the criteria contained in section 615. The first criterion is whether the practice, process, or activity in question may reasonably be anticipated to affect the stratosphere. As summarized in the background section of this preamble, the effects of ODS on stratospheric ozone are well known. Further information on the science of ozone depletion is available in the docket. The specific ODS addressed in this action, HCFC–22 and HCFC–142b, are class II substances listed under section 602(b) of the Clean Air Act. Pursuant to section 602(b), class II substances are those substances that are “known or may reasonably be anticipated to cause or contribute to harmful effects on the stratospheric ozone layer.” As discussed below under the heading “Costs Analysis and Small Business Economic Impacts,” EPA has prepared an estimate of the reduction in HCFC emissions attributable to a ban on pre-charged appliances. EPA estimates that the projected emissions of HCFC–22 between January 1, 2010 and December 31, 2019, in the absence of a ban on pre-charged appliances (based in part on charge sizes and estimated leak rates of pre-charged appliances), is approximately 4,070 ODP weighted tons. For purposes of approximate comparison, an assumed average of 407 ODP tons per year of averted emissions during this time period is approximately 11 percent of the 3,810 ODP ton U.S. compliance cap for consumption of all HCFCs each year during 2010–2014, and 27 percent of the cap during 2015–2019. Additionally, the avoided emissions of 4,070 ODP weighted tons is approximately 9 percent of all HCFC emissions projected for the United States for this same time period. These estimated reductions assume that HCFCs to be used for the US market will not be diverted to other markets in the world.

EPA believes that a reduction in the amount of the installed base of HCFC appliances reduces potential emissions and lessens the need for HCFCs for servicing. While some of the HCFCs used in appliances can be reclaimed and reused, a certain amount of the HCFCs becomes contaminated and is not available for future use. Thus restricting the installed base of HCFC appliances will have the effect of reducing the overall amount of HCFC consumption and emissions in the US. This approach is consistent with the previous actions taken to restrict applications of ozone-depleting substances where suitable substitutes exist. This action also helps further the goals of the Montreal Protocol, in particular the Parties’ recent emphasis on reducing emissions of HCFCs, as evidenced by the Parties’ agreement in September 2007 to pursue a more aggressive HCFC production and consumption phaseout. The result of the rulemaking will be fewer appliances pre-charged with HCFCs that could be emitted either during the useful lifetimes of the appliances via leaks or improper servicing, or by the improper disposal of the appliances resulting in the release of refrigerant in the U.S.

The second criterion in section 615 is whether “such effect” may reasonably be anticipated to endanger public health or welfare. The phrase “such effect,” as used in section 615, could be read in the context of this action to refer to (1) stratospheric ozone depletion generally; (2) stratospheric ozone depletion associated with HCFCs; or (3) stratospheric ozone depletion attributable to the specific practice of importing HCFC pre-charged appliances. As indicated above, EPA proposed to conclude that the stratospheric ozone depletion attributable to the specific practice of importing HCFC pre-charged appliances “may reasonably be anticipated to endanger” public health and thus is sufficient in itself. As further discussed below, EPA is finalizing this conclusion in this action. Therefore, it is not necessary to arrive at additional or definitive interpretations for purposes of this action. However, the following discussion briefly addresses the public health consequences of stratospheric ozone depletion generally as well as the stratospheric ozone depletion attributable to the specific practice of importing HCFC pre-charged appliances.

The links between stratospheric ozone depletion and skin cancer are well established. Other public health concerns include cataracts and immune suppression. Since the appearance of an ozone hole over the Antarctic in the 1980s, Americans have become aware of the health threats posed by ozone depletion, which decreases the atmosphere’s ability to protect the earth’s surface from the sun’s ultraviolet (UV) rays. The 2006 documents Scientific Assessment of Ozone Depletion, prepared by the Scientific Assessment Panel to the Montreal Protocol, and Environmental Effects of Ozone Depletion and its Interactions with Climate Change, prepared by the Environmental Effects Assessment Panel (see http://ozone.unep.org/Assessment_Panels), provide comprehensive information regarding the links between emissions of ODS, ozone layer depletion, UV radiation, and human health effects.

Skin cancer is the most common form of cancer in the U.S., with more than 1,000,000 new cases diagnosed annually. National Cancer Institute, “Common Cancer Types,” at http://www.cancer.gov/cancertopics/commoncancers). Melanoma, the most serious form of skin cancer, is also one of the fastest growing types of cancer in the U.S.; melanoma cases in this country have more than doubled in the past two decades, and the rise is expected to continue (Ries, L., Eisner, M.P., Kosary, C.L., et al, eds. SEER Cancer Statistics Review, 1973–1999. Vol 2003. Bethesda (MD): National Cancer Institute; 2004). In 2007, invasive melanoma was expected to strike more than 59,000 Americans and kill more than 8,000 (National Cancer Institute, “Melanomas,” at http://www.cancer.gov/cancertopics/types/melanoma).

Nonmelanoma skin cancers are less deadly than melanomas. Nevertheless, left untreated, they can spread, causing disfigurement and more serious health problems, and even death. There are two primary types of nonmelanoma skin cancers. Basal cell carcinomas are the most common type of skin cancer tumors. They usually appear as small,
fleshy bumps or nodules on the head and neck, but can occur on other skin areas. Basal cell carcinoma grows slowly, and rarely spreads to other parts of the body. It can, however, penetrate to the bone and cause considerable damage. Squamous cell carcinomas are tumors that may appear as nodules or as red, scaly patches. This cancer can develop into large masses, and unlike basal cell carcinoma, it can spread to other parts of the body.

EPA’s analysis estimates that approximately 1,700 total cases of cancer (nonmelanoma and cutaneous malignant melanoma) and approximately 9 premature mortalities in the United States would be avoided by banning the sale and distribution of pre-charged appliances beginning in 2010. More information regarding this projection is available in a memorandum prepared by ICF Consulting for EPA (“Avoidance of Skin Cancer Incidences and Mortalities Associated with a 2010 Ban on Products Pre-Charged with R–22”).

Other UV-related skin disorders include actinic keratoses and premature aging of the skin. Actinic keratoses are skin growths that occur on body areas exposed to the sun. The face, hands, forearms, and the “V” of the neck are especially susceptible to this type of lesion. Although premalignant, actinic keratoses are a risk factor for squamous cell carcinoma. Chronic exposure to UV radiation also causes premature aging, which over time can make the skin become thick, wrinkled, and leathery. Cataracts are a form of eye damage in which a loss of transparency in the lens of the eye clouds vision. If left untreated, cataracts can lead to blindness. Research has shown that UV radiation increases the likelihood of certain cataracts. Although curable with modern eye surgery, cataracts diminish the eyesight of millions of Americans. Other kinds of eye damage include pterygium (i.e., tissue growth that can block vision), skin cancer around the eyes, and degeneration of the macula (i.e., the part of the retina where visual perception is most acute).

Based on the discussion above of the two criteria contained in section 615, EPA concludes that beginning January 1, 2010, the practice of selling and distributing pre-charged air-conditioning and refrigeration appliances and pre-charged appliance components containing HCFC–22 or HCFC–142b, as well as air-conditioning and refrigeration appliances suitable for use solely with newly produced HCFC–22 or HCFC–142b may reasonably be anticipated to affect ozone in the stratosphere, and such effect may reasonably be anticipated to endanger public health.

D. Defining Air-Conditioning and Refrigeration Appliances and Pre-Charged Appliance Components

In the NPRM, EPA proposed that any air-conditioning or refrigeration appliances containing HCFC–22 or HCFC–142b would be subject to the proposed ban on the sale and distribution in interstate commerce if manufactured on or after January 1, 2010. EPA proposed that the ban include pre-charged components for appliances, such as line-sets and pre-charged compressors, because such pre-charged components present the same concerns as pre-charged appliances.

i. Appliance

Section 601 of the CAA defines the term “Appliance” to mean “any device which contains and uses a refrigerant and which is used for household or commercial purposes, including any air conditioner, refrigerator, chiller, or freezer.” For purposes of Subpart I, EPA proposed to use the definition of “appliance” in EPA’s refrigerant recycling and emissions reduction regulations at 40 CFR part 82, subpart F, which is identical to the statutory definition.

EPA requested comment on using the definition of appliance that appears in subpart F to determine what would be subject to the proposed ban. In response to the Agency’s request, commenters noted that they do not believe that every air-conditioning and refrigeration system—regardless of use, application, complexity (such as an industrial process refrigeration system)—should be subject to the proposed rule in the same manner. Specifically, these commenters suggested that the scope of the appliances covered by the rule be revised to clearly exclude residential, commercial, and industrial process refrigeration systems that are not pre-charged when they leave the factory, but are designed to use HCFC–22 or HCFC–142b. The commenters requested that EPA clarify that “any device which contains and uses a refrigerant” would not include systems that can use refrigerants, but are not pre-charged.

EPA agrees with comments stating that appliance be defined consistently with the previously promulgated definition of appliance at subpart F. EPA is noting, and later discusses in detail, that equipment (including residential, commercial, and industrial process refrigeration) that is not pre-charged with HCFC–22 or HCFC–142b is not covered under this rulemaking. EPA believes that consistency in these definitions benefits the regulated community. Failure to provide a consistent regulatory definition would likely lead to uncertainty in the refrigeration and air-conditioning supply and service sectors, countering the Agency’s efforts to phase out use of HCFC–22 and HCFC–142b in new installations.

In order to provide regulatory clarity, this final rule applies the same definition of appliance that is found at CAA section 601 and promulgated at 40 CFR part 82, subpart F. The definition of appliance means any device which contains and uses a refrigerant and which is used for household or commercial purposes, including any air conditioner, refrigerator, chiller, or freezer.

For further clarification, EPA considers the following equipment as appliances, some of which are typically pre-charged with HCFC–22 or HCFC–142b:

- Air-to-air heat pumps;
- Chest or upright freezers;
- Ductless air conditioners;
- Dehumidifiers;
- Ground-source heat pumps;
- Packaged air conditioners and heat pumps;
- Unitary air conditioners; and
- Window air-conditioning units.

This listing is not intended to be exhaustive, but includes appliances that may be manufactured and shipped pre-charged with refrigerant.

ii. Pre-Charged Appliance Component

In the NPRM, EPA proposed to define pre-charged appliance component as any portion of a pre-charged appliance including but not limited to condensers and line sets that are charged with refrigerant prior to sale or distribution or offer for sale or distribution in interstate commerce.

EPA has not previously promulgated a definition of pre-charged appliance component. However, in an earlier rulemaking addressing the sales of pre-charged appliance components, the Agency stated that pre-charged components are parts of but “are not clearly not appliances” (November 9, 1994; 59 FR 55912). Commenters noted that EPA provides similar language on its
In proposing to define pre-charged appliance component, EPA requested comment regarding the universe of components that are typically manufactured and/or shipped pre-charged with HCFC–22 or HCFC–142b. EPA received comment from major appliance and component manufacturers identifying equipment that is typically pre-charged with refrigerant, specifically HCFC–22. These manufacturers stated that components such as evaporator coils, condenser coils, compressors or line sets are often shipped pre-charged with HCFC–22. EPA received one request to add “condensing units” to the list of examples of pre-charged appliance components. The remaining comments concerning the universe of pre-charged appliance components concerned the sale or distribution in interstate commerce. EPA requested definitions of the terms “appliance” and “component” that may be pre-charged with refrigerant as a part of the manufacturing process prior to sale or distribution or offer for sale or distribution in interstate commerce.

For further clarification, the following are components that in themselves do not satisfy the definition of appliance, but are typically pre-charged with HCFC–22 or HCFC–142b:
- Line sets;
- Condensing units;
- Compressors; and
- Coils.

This listing is not intended to be exhaustive, but includes components that may be manufactured and shipped pre-charged with refrigerant.

EPA is changing the proposed definition of pre-charged appliance component to add compressors, condensing units, and coils to the list of examples of appliance components that may be pre-charged with refrigerant as a part of the manufacturing process prior to the component’s sale or distribution or offer for sale or distribution in interstate commerce. There are several reasons why EPA does not use the term “manufactured” in the NPRM. However, the term manufactured as it relates to the sale or distribution of pre-charged appliances and appliance components was discussed in detail in the preamble to the NPRM adjusting the allowance system for HCFC production, import, and export (73 FR 78680), which was published on the same day (December 23, 2008) as the NPRM for this final pre-charged appliance rule. That discussion of the term included four criteria for when an appliance would be considered “manufactured.” Due to the volume of comments concerning manufacture and date of manufacture, EPA believes that further explanation of EPA’s use of the term “manufactured” in the context of this action is warranted.

The vast majority of comments received in response to the NPRM related to the sale of inventoried appliances and components that were manufactured prior to January 1, 2010, but would likely remain in inventories after 2010. EPA received comment that its understanding of the term “manufactured” is not consistent with previous conventions defining a product as “manufactured” when it leaves the manufacturer’s final assembly process, is packed for shipment, and placed into initial inventory. Several commenters noted that they preferred a definition of manufactured under which, the date of manufacture is a finite date controlled by the manufacturer and is not dependent on the dealer network or purchase by the ultimate consumer.

EPA received numerous comments from manufacturers and distributors of pre-charged appliances and components stating that the Agency should interpret “date of manufacture” for an appliance to conform to the date of manufacture of components, such as the date of condenser manufacture. These commenters recommended that EPA define the date of manufacture in terms of the date of manufacture displayed on name-plate marking, but no sooner than the date on which the assembly and end-of-line testing of the equipment item in question are substantially completed or the equipment is shipped from the factory or put into the original equipment manufacturer’s (OEM’s) inventory, whichever occurs first. EPA believes that the concern expressed in many of the comments arises from a commingling of the definitions of the terms “appliance” and “pre-charged appliance component.”

There are several reasons why EPA does not equate the date of component manufacture to the date of appliance manufacture. As previously stated, components in themselves do not satisfy the previously promulgated definition of appliance, which is identical to the statutory definition. Components likely have distinct individual manufacture dates and may be field installed months or even years after their manufacture. EPA’s reliance on the date of a particular component’s manufacture, as a means of determining when an appliance was manufactured, would lead to a patchwork approach that could create confusion. In addition, because components may have differing manufacture dates, such an approach would require the Agency to provide makeshift determinations as to which major component’s manufacture date would determine the date of appliance manufacture.

EPA is promulgating a definition in today’s final rule stating that an appliance is “manufactured” on the date that the appliance meets four...
criteria: (1) The appliance’s refrigerant circuit is complete, (2) the appliance can function, (3) the appliance is charged with refrigerant, and (4) the appliance is ready for use for its intended purpose. Small appliances, such as refrigerators and window air-conditioners, thus are “manufactured” while the appliance is at a manufacturing facility. For instance, a small appliance (such as a residential refrigerator) that has been pre-charged with refrigerant by the OEM has gone through the entire production line so that all mechanical and electrical procedures are complete, and is a “stand-alone” piece of equipment (i.e., it only needs to be plugged into an electrical outlet and turned on to function properly). For such appliances, EPA intends to treat the date identified on the appliance by the OEM as the date of manufacture.

Under the definition of “manufactured” in today’s final rule, appliances that are field charged or have the refrigerant circuit completed onsite (for example, residential split systems), regardless of whether additional refrigerant is added on-site or not, would not be “manufactured” until installation of all of the components and other parts is completed and the appliance is charged with refrigerant. EPA will not consider such an appliance to be “manufactured” unless all four criteria of the definition are met. For such appliances, the date of manufacture may be determined by invoices, contracts, or service records indicating that the appliance manufacture was completed.

For pre-charged components of appliances, EPA considers the component to be “manufactured” on the date that the OEM has physically completed assembly of the component, the component is charged with refrigerant, and the component is ready for initial distribution or sale. EPA intends to treat the date identified on the pre-charged component by the OEM as the date of component manufacture. While EPA did not propose a definition of “manufactured” for appliance components, EPA believes including such a definition in the final rule is appropriate in light of the extensive comments requesting clarification on the date of manufacture of both components and complete appliances. This definition reflects the understanding expressed by commenters as it pertains to when components are manufactured.

Due to the volume of comments received concerning the date of manufacture, including the request that the Agency promulgate a definition of “manufactured,” EPA is adding a definition of “manufactured,” with respect to appliances and appliance components, at § 82.302. Manufactured, for an appliance, means the date on which the appliance’s refrigerant circuit is complete, the appliance can function, the appliance holds a refrigerant charge, and the appliance is ready for use for its intended purposes; for a pre-charged appliance component, “manufactured” means the date that the original equipment manufacturer has physically completed assembly of the component, the component is charged with refrigerant, and the component is ready for initial sale or distribution.

E. Ban on Sale or Distribution or Offer for Sale or Distribution in Interstate Commerce

In the NPRM, EPA proposed to ban the sale and distribution, or the offer for sale or distribution in interstate commerce, of any appliance or appliance component that is pre-charged with HCFC–22 or HCFC–142b and is manufactured on or after January 1, 2010. In the NPRM, EPA put forth the Agency’s interpretation, consistent with previous actions under CAA § 610, that the term “interstate commerce” as it applies to the sale and distribution of equipment manufacturer has gone through the entire production line so that all mechanical and electrical procedures are complete, and is a “stand-alone” piece of equipment (i.e., it only needs to be plugged into an electrical outlet and turned on to function properly). For such appliances, EPA intends to treat the date identified on the appliance by the OEM as the date of manufacture.

EPA has previously banned the sale or distribution, and offer for sale or distribution in interstate commerce, of certain products containing or manufactured with class II substances, including most pressurized dispensers and plastic foam products (58 FR 69637). EPA has also previously banned the sale or distribution, and offer for sale or distribution in interstate commerce, of air-conditioning and refrigeration appliances containing class I substances (66 FR 57512). EPA’s interpretation of interstate commerce for purposes of these bans does not cover the sale, distribution, or offer of sale or distribution of an appliance or an appliance component if the appliance or component is completely manufactured, distributed, and sold without ever crossing State lines. To lie outside the interpretation of interstate commerce, the appliance or component must be manufactured, distributed, and sold exclusively within a particular State, and all of the raw materials, components, equipment, and labor that went into the manufacturing, distributing, selling, or offering for sale or distribution of such a product originated within that State as well.

i. Existing Inventories of Pre-Charged Appliances and Components Manufactured Prior to January 1, 2010

In the NPRM, EPA proposed that effective January 1, 2010, no person may sell or distribute, or offer to sell or distribute, in interstate commerce any pre-charged appliance or appliance component manufactured on or after January 1, 2010 containing HCFC–22, HCFC–142b, or a blend containing one or both of these controlled substances (73 FR 78713). It remains EPA’s intent to ban the sale or distribution in interstate commerce of new pre-charged appliances and pre-charged components containing HCFC–22 or HCFC–142b that would be used to configure new appliances in the field, while still allowing the use of inventoried components that were manufactured prior to January 1, 2010 to service appliances that were manufactured prior to January 1, 2010.

EPA received numerous comments in response to the proposal concerning the “date of manufacture” of an appliance as it applies to the sale of inventoried pre-charged appliances and components. Overwhelmingly, the commenters focused on the concern of stranding stockpiled inventory that was manufactured prior to January 1, 2010, but not yet sold or distributed. Commenters referenced the need to sell pre-charged appliances and components manufactured prior to January 1, 2010, in order to service existing appliances across multiple refrigeration and air-conditioning sectors, and requested that EPA define a consistent policy for the date of manufacture that would apply to the refrigerant, the components, and the appliances.

Some commenters believed that the proposed ban included existing pre-charged appliances and components that were manufactured prior to but remain in inventory as of January 1, 2010, and thus expressed concern about creating a great deal of stranded inventory, resulting in potentially large economic losses for manufacturers. The commenters requested that the final rule clearly state that industry is permitted to use existing inventories of pre-charged appliance components that were manufactured or imported prior to January 1, 2010 to service existing appliances. Other commenters suggested a sell-through for pre-2010 pre-charged appliances and appliance components during the 2010 calendar year.

EPA also received comment from the Small Business Administration (SBA) requesting that EPA interpret “manufactured” as “the date in which
the appliance is placed in initial inventory, where the original product has completed all of its manufacturing processes and is ready for sale by the manufacturer,” a definition which the SBA finds consistent with both industry practice and the EPA final rule Reconsideration of the 610 Nonessential Products Ban (66 FR 57511; November 15, 2001). In the final rule, EPA permitted the sale and distribution of air-conditioning and refrigeration appliances containing class I controlled substances that were placed into initial inventory by January 1, 2010. EPA stated that the 2001 rule gives an interpretation of initial inventory that is compatible with common industry usage as the date “that the original product has completed all its processes and is ready for sale by the manufacturer.”

EPA recognizes that air-conditioning and refrigeration appliances containing HCFC–22 or HCFC–142b could be manufactured prior to January 1, 2010, but may not have reached the ultimate consumer by January 1, 2010. EPA contemplated mechanisms for either a “sell-through” or a “grandfathering” of appliances that were previously manufactured and placed into an initial inventory—similar to the approaches in 40 CFR part 82, subpart C, under the Nonessential Products Ban for class I and class II controlled substances. However, we note that the proposed ban would not have prohibited the sale or distribution of any appliance or appliance component manufactured before January 1, 2010. Thus, in effect, the proposed ban already contained a “sell-through” provision.

EPA does not intend to strand stocks of components or make existing appliances obsolete by not allowing them to be serviced with replacement components. EPA noted in the NPRM that it did not intend to regulate the servicing of appliances that were manufactured prior to January 1, 2010 (73 FR 78712). EPA noted that servicing is regulated under other authorities, notably 40 CFR part 82, subpart F. EPA is allowing the continued use of recovered and reclaimed HCFC–22 to service existing equipment, as well as allowing the limited production and import of virgin HCFC–22 and HCFC–142b to service existing appliances, as promulgated in the accompanying final rule titled “Protection of Stratospheric Ozone: Adjustments to the Allowance System for Controlling HCFC Production, Import, and Export” (EPA Docket: EPA–HQ–OAR–2008–0496). EPA believes necessary to continue to permit the servicing of air-conditioning and refrigeration appliances manufactured prior to January 1, 2010, to ensure a smooth transition to alternatives.

EPA recognizes that existing stockpiles of replacement components could be used to service existing appliances, and that such service would be likely to occur after the January 1, 2010 phaseout date. EPA intends to allow the continued servicing of these appliances in order to allow for a smooth transition away from HCFC–22 and HCFC–142b. This intent is consistent with the companion final rule allocating allowances for the production and consumption of HCFC–22 and HCFC–142b after January 1, 2010, in order to service the existing stock of appliances in residential, commercial, and industrial refrigeration and air-conditioning end-uses. EPA is clarifying that pre-charged appliance components, such as condensing units, line sets, evaporators, and compressors that were manufactured before January 1, 2010, may be sold for purposes of servicing appliances manufactured before that date. Manufacturers, distributors, and wholesalers maintaining stockpiles of pre-2010 components that are pre-charged with virgin HCFC–22 or HCFC–142b can continue to sell such components in order to service existing appliances in the year 2010 and beyond.

Consistent with the proposal, this final rule does not apply the prohibition against the sale and distribution in interstate commerce of any air-conditioning or refrigeration pre-charged appliance component for air-conditioning or refrigeration appliances manufactured on or before January 1, 2010 containing HCFC–22 or HCFC–142b and any pre-charged appliance component for air-conditioning or refrigeration appliances manufactured on or after January 1, 2010 containing HCFC–22 or HCFC–142b. Hence, manufacturers and distributors are allowed to sell or distribute pre-charged HCFC–22 or HCFC–142b appliances and components that are in inventory as of January 1, 2010. There is no time limit for the sale or distribution of such pre-charged appliances or components.

ii. Use of Recovered and Reclaimed HCFC–22 and HCFC–142b

In the NPRM EPA proposed that effective January 1, 2010, no person may sell or distribute, or offer to sell or distribute, in interstate commerce any newly-manufactured pre-charged appliance or appliance component pre-charged with HCFC–22 or HCFC–142, unless the HCFGs were previously reclaimed. EPA defines “reclaim” at 40 CFR 82.152 as “to reprocess refrigerant to all of the specifications in appendix A to 40 CFR part 82, subpart F (based on ARI Standard 700–1995, Specification for Fluorocarbons and Other Refrigerants) that are applicable to that refrigerant and to verify that the refrigerant meets those specifications using the analytical methodology prescribed in section 5 of appendix A of 40 CFR part 82, subpart F.” EPA limits reclamation to entities that have sought and have received EPA certification as refrigerant reclaimers, and restricts the sale of used refrigerant to a new owner unless it has first been reclaimed by an EPA-certified refrigerant reclaimer.

EPA also proposed to apply the ban on sale and distribution of pre-charged appliances to appliances manufactured after January 1, 2010 that are not pre-charged but are “suitable only for use” with newly produced HCFC–22 or HCFC–142b, or blends thereof. When referring to appliances that are suitable for use solely with newly produced HCFC–22 or HCFC–142b, EPA meant appliances that, according to the manufacturer, would not be suitable for use with recycled or reclaimed refrigerants. Such a situation could potentially arise if, for example, manufacturer’s directions stated specifically that warranties are void if the appliance is charged with reclaimed refrigerant. As a means of addressing such sales, EPA had proposed a prohibition at §82.302(b) against the sale and distribution in interstate commerce of any air-conditioning or refrigeration appliance manufactured on or after January 1, 2010, that is suitable only for use with newly produced HCFC–22, HCFC–142b, or a blend containing one or both of these controlled substances. While the proposal addressed suitability as it pertains to pre-charged appliances, EPA intended to include components in the discussion as well.

EPA did not receive comments specifically addressing the proposal to apply the ban on sale and distribution of pre-charged appliances to appliances manufactured after January 1, 2010 that are not pre-charged but are “suitable only for use” with newly produced HCFC–22 or HCFC–142b, or blends thereof. However, EPA has reevaluated the concept of “suitability” pertaining to the future use of components needed to service existing appliances...
manufactured prior to 2010. Appliances and components that were not specifically as being suitable for use only with newly produced HCFC–22 or HCFC–142b could still be charged with newly produced substances, even though such use was not promoted by the manufacturer. Thus, the proposed ban on appliances suitable only for use with newly-produced or virgin HCFC–22 or HCFC–142b would not have the effect of ending use of newly-produced or virgin quantities of these HCFCs in new appliances.

As previously stated, EPA does not intend to ban the sale and distribution of components needed to service existing appliances. EPA believes that a ban on pre-charged appliances and components based on statements by the manufacturer that the warranty would apply only if used with newly-produced or virgin HCFCs could be misinterpreted as a ban on use of components needed to service existing appliances. Use of newly-produced HCFCs in existing appliances is not prohibited. In addition, the accompanying HCFC allocation rulemaking “Protection of Stratospheric Ozone: Adjustments to the Allowance System for Controlling HCFC Production, Import, and Export” (EPA Docket: EPA–HQ–OAR–2008–0496), specifically prohibits the use of virgin HCFC–22 or HCFC–142b in appliances manufactured on or after January 1, 2010. EPA believes that this prohibition provides adequate coverage against the use of virgin HCFC–22 or HCFC–142b. Therefore, EPA is not finalizing the proposed requirement to prohibit sale and distribution of appliances and components that are not pre-charged, but suitable only for use with newly produced or virgin HCFC–22 or HCFC–142b at § 82.302(b).

EPA requested and received several comments concerning the use of reclaimed refrigerant in new pre-charged appliances and pre-charged appliance components. Commenters requested that the Agency explicitly address its intent to allow or disallow the use of recovered and reclaimed refrigerant in newly manufactured pre-charged appliances and compliance components. Seven commenters believed that it would be impossible for EPA to enforce such a provision, because it would be unable to determine whether a system is charged with virgin or recovered and reclaimed refrigerant (since both refrigerants meet the same purity standard, ARI 700); therefore, the ban should be extended to newly manufactured equipment using reclaimed refrigerant, as well as virgin HCFC–22 or HCFC–142b. Commenters expressed concern that the continued proliferation of new HCFC–22 systems after 2010 that will be allowed to use reclaimed refrigerant would only exacerbate shortages for HCFC–22 service quantities by perpetuating the introduction of new HCFC–22 systems into the marketplace, delaying the U.S. transition to alternatives to ozone-depleting substances.

EPA’s intent in proposing to exclude appliances and components charged with reclaimed refrigerant from the prohibition on sale and distribution was to focus the prohibition on the virgin HCFCs whose use in new appliances is banned under section 605(a). The intent of the proposal was to make certain that any virgin HCFC–22 or HCFC–142b contained in pre-charged components is only used in the service of appliances manufactured prior to January 1, 2010. EPA agrees with commenters that noted the difficulty in determining whether refrigerant that is undergoing a production phaseout in the U.S. (e.g., HCFC–22) is virgin refrigerant or is used refrigerant that has been reclaimed. This is especially true for appliances and components that are produced and pre-charged abroad and imported into the United States. It would not be possible for EPA to determine whether such imported pre-charged appliances and components were manufactured with reclaimed refrigerant. Because many countries that export pre-charged appliances and components will not be obligated to freeze HCFC consumption until 2013, consistent with their Montreal Protocol commitments, pre-charged appliances imported from those countries could easily contain virgin HCFCs. In the accompanying HCFC allocation rulemaking “Protection of Stratospheric Ozone: Adjustments to the Allowance System for Controlling HCFC Production, Import, and Export” (EPA Docket: EPA–HQ–OAR–2008–0496), EPA has achieved the 2010 step-down in production and consumption in large part by considering the HCFC servicing demand for 2010–2014. In that related rulemaking, EPA has projected the HCFC appliance servicing demand for 2010–2014 and assumed that the total demand will be met in part through virgin HCFCs and in part through use of reclaimed and recycled HCFCs. As noted in the comments, adding new HCFC appliances to the installed base would cause the servicing demand to grow, potentially resulting in increases in the amounts of HCFC needed to service existing appliances, and likely hinder the growth of alternative refrigerants that do not directly contribute to the depletion of the ozone layer.

EPA supports the use of components to service appliances that were manufactured before January 1, 2010, but we recognize the difficulty in determining whether pre-charged appliances and components, especially those being imported into the United States, have been charged with virgin or reclaimed HCFC–22 or HCFC–142b. EPA is not banning the sale and distribution of un-charged or previously manufactured components needed to service existing appliances manufactured prior to January 1, 2010. However, due to the complexities discussed above, EPA does not believe that components pre-charged with reclaimed refrigerant should be exempted from the prohibition on sale or distribution in interstate commerce of pre-charged appliances and components manufactured in 2010 and beyond. This finding does not prohibit manufacturers from producing replacement components needed to service existing appliances, as long as the components are not pre-charged with HCFC–22 or HCFC–142b, regardless if the HCFC is reclaimed or virgin. As noted by commenters representing manufacturers of appliances and components, such components can be sold or distributed in interstate commerce without being pre-charged. Such replacement components can be installed into existing appliances and charged on-site with reclaimed or virgin HCFC–22 or HCFC–142b.

After considering comments and in light of the related rulemaking “Protection of Stratospheric Ozone: Adjustments to the Allowance System for Controlling HCFC Production, Import, and Export” (EPA Docket: EPA–HQ–OAR–2008–0496), EPA has decided to extend the January 1, 2010
prohibition to appliances that are pre-charged with reclaimed refrigerant. The final rule thus does not include the proposed text at § 82.306(d), which stated that the prohibition would not apply where the refrigerant was “used, recovered and reclaimed.” Therefore, EPA is prohibiting, at § 82.304, the sale or distribution, and the offer for sale or distribution in interstate commerce of all appliances and components that are pre-charged with HCFC–22 or HCFC–142b, regardless of whether the refrigerant is virgin or reclaimed.

iii. Sale and Distribution of Appliances and Components Without Refrigerant

Several comments asked EPA to state explicitly that the prohibition does not extend to appliance components that are needed to service existing appliances and are shipped “dry” or with a holding charge of an inert gas. EPA received comments from major U.S. appliance manufacturers stating that there is no technical reason why the types of appliances and components that are currently charged with refrigerant prior to being sold or distributed in interstate commerce could not be shipped “dry” or with a holding charge of an inert gas nitrogen. According to comments received by the Agency, the lone exception is that certain TXVs must be received by the Agency, the lone exception is that certain TXVs must be received by the Agency. EPA has previously stated that TXVs are not pre-charged with HCFC–22 or HCFC–142b. The ban applies regardless of whether the HCFCs are virgin or reclaimed. Therefore, component manufacturers, distributors, and sellers are prohibited from selling or distributing components (such as but not limited to condensers and line sets) that were manufactured on or after January 1, 2010 and pre-charged with either virgin or reclaimed HCFC–22 or HCFC–142b.

This prohibition does not apply to appliance components manufactured on or after January 1, 2010 that are sold, distributed, or otherwise introduced into interstate commerce uncharged or with a holding charge of an inert gas, such as nitrogen. Such uncharged components could be used as replacement components for pre-2010 appliances in need of service and charged with either virgin or reclaimed HCFC–22 or HCFC–142b.

iv. Imports and Exports of Pre-Charged Appliances and Components

Commenters stated that the proposal would allow foreign manufacturers to export pre-charged products to the U.S., and that EPA should evenly and fairly impose the prohibition on both domestic and foreign manufacturers. Commenters also stated that allowing the import of pre-charged components could encourage the stockpiling of foreign-made pre-charged components that could be introduced into U.S. interstate commerce well after domestic manufacturers cease their production of these components prior to January 1, 2010.

EPA received numerous comments requesting that it allow the continued export of un-charged and pre-charged HCFC–22 equipment to Article 5 countries5 after January 1, 2010. Commenters stated that it is unrealistic to assume that [the HCFC–22] market share in Article 5 countries would be replaced by non-HCFC products, and that developing countries’ demand for HCFC refrigerant carries with it an implicit recognition of these countries’ need for equipment which uses HCFC refrigerants. Further, if these countries need to import HCFCs at least until 2020, then commenters maintain it is reasonable to assume the need for HCFC-using equipment will persist until 2020 as well. Commenters also stated that they believe that EPA’s interpretation of interstate commerce to include exports

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5 Article 5 (A5) countries—the Montreal Protocol’s identifying term for developing countries, as listed in Annex 4 to Appendix C to 40 CFR §2, subpart A.
will disadvantage U.S. manufacturers that are globally competing against foreign manufacturers selling in Article 5 countries, resulting in possible loss of domestic jobs, the closing of small businesses, and probably the net export status of the industry. Commenters suggested that the final rule provide relief by specifying that the Agency would allow the export of appliances intended for use in A5 countries if such appliances are exported without a refrigerant charge.

EPA is not attempting to regulate foreign commerce through this action. EPA is solely regulating U.S. interstate commerce, which includes both the domestic sale and distribution of any appliance imported into the United States, and the domestic sale or distribution of any appliance intended for ultimate export from the United States. The prohibition on sale and distribution applies to imported products and products destined for export to the same extent that it applies to products manufactured and distributed solely within the United States. EPA previously discussed this interpretation of interstate commerce in the regulations implementing the ban on nonessential products containing or manufactured with a class II substance (58 FR 69638). The sale or distribution, or offer for sale or distribution, of imported products or products destined for export within the scope of this final rule would be subject to the same restrictions as the sale or distribution, or offer of sale or distribution, of products within the scope of that nonessential products ban.

EPA is not restricting the export of appliances that are shipped without refrigerant or with a holding charge of nitrogen. Thus, U.S. manufacturers are not precluded from responding to the demand for HCFC appliances in Article 5 countries. Similarly, this ban does not affect the import of bulk quantities of used HCFC–22 or HCFC–142b under the EPA petitioning process established under 40 CFR 82.24(c). Importers of bulk shipments of used HCFC–22 or HCFC–142b greater than five pounds must still seek and obtain approval from EPA to import on a per-shipment basis.

This rule concerns only the sale or distribution, and offer for sale or distribution, of pre-charged appliances and appliance components manufactured in 2010 and beyond. This action is not intended to govern the sale or distribution, or offer for sale or distribution, of any previously owned or used appliances that were manufactured prior to January 1, 2010.

v. Transshipments of Pre-Charged Appliances and Components

EPA received comments stating that the Agency had not addressed “transhipments,” meaning the movement of products through the U.S. on their way to another country. These commenters requested that the final rule clearly state that transshipments of equipment pre-charged with HCFC–22 be allowed on or after January 1, 2010. Transshipments are not destined for use by United States entities, but are held temporarily while awaiting shipment to their ultimate destination. As is done with bulk shipments of controlled class I substances (such as CFC refrigerants), some distributors of pre-charged products will accept transshipments of products that are brought into the United States and temporarily stored in bonded warehouses while they await shipment out of the country.

While this action does apply to imported products, it does not regulate the act of import as such. Sale and distribution in interstate commerce, rather than import or export, are the prohibited acts. In addition, transshipment is a defined term, and EPA is stating the regulatory history of the term for purposes of clarity. EPA has previously defined “transshipment” of controlled substances (at § 82.3) and made the distinction between a transshipment and an import that is subsequently re-exported. The term “transshipment” is defined as “the continuous shipment of a controlled substance, from a foreign State of origin through the United States or its territories, to a second foreign state of final destination, as long as the shipment does not enter into United States jurisdiction. A transshipment, as it moves through the United States or its territories, cannot be re-packaged, sorted or otherwise changed in condition.” The first discussion of the term “transshipment” in the context of the ODS phaseout program appeared in the proposed rulemaking published in the Federal Register on March 18, 1993 (58 FR 15014, 15004). The December 10, 1993 final rule defined “transshipment as the continuous shipment of a controlled substance from a foreign state of origin through the United States or its territories to a second foreign state of final destination.” (58 FR 65018, 65064). The clarifying phrase “as long as the shipment does not enter into United States jurisdiction” was added on May 10, 1995 (60 FR 24970, 24983). EPA promulgated a definition of transshipment that does not permit a shipment to be re-packaged. The current definition distinguishes between a transshipment and a shipment that is imported, re-packaged and then exported, by stating that a transshipment “cannot be re-packaged, sorted or otherwise changed in condition” as it moves through the United States or its territories.

The Agency generally exempts transshipments from its ODS regulatory prohibitions at 40 CFR Subpart A. For example, EPA does not apply its ODS import prohibitions to bulk controlled substances, such as CFC–12, that are stored in government bonded warehouses and otherwise meet the definition of a transshipment. For purposes of this final rule, EPA will not consider transshipment of pre-charged appliances or components as sale or distribution in interstate commerce, as defined at § 82.3. However, appliances and components that have not originated from a foreign state but are being stored in the United States for ultimate export are not considered transshipments, and are covered by this rule if sold or distributed in interstate commerce prior to export.

vi. Existing Contracts or Plans for Pre-Charged Appliances and Components

EPA received comment requesting that it provide flexibility for persons who may be unable to comply with the ban for reasons outside of their control. Some commenters interpreted the proposal as banning all sale and distribution of pre-charged appliances and components, even those manufactured prior to January 1, 2010. (As discussed elsewhere in this notice, the proposed and final prohibitions on sale and distribution do not apply to appliances and components manufactured prior to January 1, 2010.) Commenters suggested that in order to minimize the adverse economic effects of the pre-charged ban that EPA make exemptions in cases where binding contracts are in place for the purchase of equipment that was manufactured prior to January 1, 2010, but that cannot be delivered until after January 1, 2010. Commenters also requested that EPA exempt appliances and components intended for construction projects that have received building code approval of plans that include equipment subject to the pre-charged ban, but will not be completed until after January 1, 2010. Commenters requested an expansion of § 82.306(a) exempting new installation projects using HCFC–22 or HCFC–142b appliances that have completed the bidding process or have received building code approval prior to January 1, 2010.

These comments relate primarily to the section 605(a) prohibition on use of...
virgin HCFCs in the manufacture of new appliances. In the accompanying final rule titled “Protection of Stratospheric Ozone: Adjustments to the Allowance System for Controlling HCFC Production, Import, and Export” (EPA Docket: EPA–HQ–OAR–2008–0496), EPA is granting flexibility in limited instances where construction has begun but for various reasons beyond their control (e.g., budget shortfalls, weather delays, labor strikes) would not be able to complete projects prior to January 1, 2010.

EPA recognizes that contractual arrangements exist for construction projects that involve air-conditioning systems for which “manufacture” (including completion of the refrigerant loop) will not occur until after December 31, 2009. The accompanying allocation rule establishes a grandfathering provision which allows HCFC–22 appliances to be “manufactured” onsite during calendar year 2010, if the components are manufactured prior to January 1, 2010, and are specified in a building permit or contract dated before January 1, 2010, for use on a particular project. Given the flexibility offered by the allocation rule making, EPA does not find it necessary to adopt a grandfathering provision into § 82.306(a) of this final rule.

F. Costs Analysis and Small Business Economic Impacts

(i) What Are the Impacts on Stratospheric Ozone Avoided Through This Final Action?

The global HCFC phaseout is already underway, and restrictions on production, import, and sale and distribution of specific types of HCFC products are already in place in the United States and in international markets. The United States banned the sale and distribution of aerosols, pressurized dispensers, and foam products containing HCFCs in 1994, and the European Union has banned HCFCs for refrigerant use in new equipment since 2001 (Regulation EC No. 2037/2000 of the European Parliament). Many manufacturers of pre-charged appliances already service the European market and other markets with non-HCFC pre-charged appliances and components. EPA believes this should ease the implementation of a ban on sale and distribution in interstate commerce. Given that retooling and other design changes have either already occurred to meet the European and other markets, or will occur as a result of the global phaseout of HCFCs, EPA believes costs associated directly with this rulemaking are limited. As with any analysis, EPA’s relies on a reasonable understanding of current factors affecting costs. Should any of these factors change, costs may change as well. For example, introduction of additional alternatives appears to be accelerating based on new submissions to EPA’s Significant New Alternatives Policy (SNAP) program. Availability of additional alternatives in the air-conditioning and refrigeration sectors may reduce costs. Alternatively, new factors that restrict availability of alternatives may raise costs. Based on current conditions, EPA believes that our assessment of costs is reasonable.

EPA estimates that that on average, between 2006 and 2008, approximately 9.5 million pre-charged appliances, including heat pumps, window air conditioners, and dehumidifiers, were imported into the United States and sold throughout the country. This figure includes units pre-charged with refrigerants other than HCFC–22 or HCFC–142b. EPA estimates that 8.4 million pre-charged appliances were pre-charged with HCFC–22. EPA believes this is a mature and stable market and EPA projects that in the absence of a restriction on sale and distribution, as many as 11 million pre-charged HCFC appliances could have been imported and made available for sale or distribution in the U.S., on an annual basis, during 2010–2019 using reasonable assumptions concerning market growth. Separate domestic restrictions on the production and import of HCFC–22 and HCFC–142b would essentially preclude the domestic manufacture and initial charging of these appliances with virgin HCFC–22 or HCFC–142b as of January 1, 2010.

In estimating the environmental impacts associated with continuing to allow the sale and distribution of HCFC–22 and HCFC–142b pre-charged appliances in interstate commerce, EPA considered factors such as the number of different appliances likely to be available, the average charge sizes for the appliances, and the expected service lifetimes. EPA found that at least 24 different appliance types are likely to be serviced during their useful lifetime. The projected additional emission of HCFC–22 between January 1, 2010, and December 31, 2019, in the absence of a ban on pre-charged appliances, based on charge sizes and leak rates is approximately 4,070 ODPtr-weighted metric tons from these pre-charged appliances. By comparison, in accordance with the Montreal Protocol adjustments from September 2007, in 2010 the cap for consumption for the total basket of HCFCs, including HCFC–22, is limited to 3,810 ODPtr annual for the years 2010–2014 and 1,524 ODPtr tons for the years 2015–2020. This consumption is for the total basket of HCFCs, with HCFC–22 and HCFC–142b restricted to servicing the existing base of air-conditioning and refrigeration appliances—in particular the units that are charged onsite, including but not limited to, chillers and residential unitary units.

The maximum level of consumption of HCFCs will also include use of other HCFCs to service and charge both existing and newly manufactured appliances, and in other applications such as niche solvent or fire suppression uses prior to 2015. EPA received comments on the projected number of pre-charged HCFC appliances that could be available after January 1, 2010, and the associated amount of ODS that would be necessary to both charge and service these appliances during their useful lifetimes. A few commenters stated that EPA had not identified or discussed the impacts of the rule on distributors and contractors, or small businesses and consumers. Additionally, they indicated that EPA failed to analyze consumer behaviors that may be impacted by costs, and also did not conduct a regulatory flexibility analysis. EPA received specific comments from representatives of recreational boat manufacturers stating that the NPRM will have negative financial impacts on thousands of small boat builders, marine product distributors, boat dealers, and repair facilities that may have A/C and refrigeration units in inventory before January 1, 2010.

EPA has addressed the concern of small businesses that stocked (pre-2010) inventory would be stranded under their interpretation of the proposed provisions. EPA is allowing the sale and distribution of pre-charged components (such as condensing units, line sets, evaporator coils, and compressors) and fully-assembled pre-charged appliances (such as freezers and window air conditioners) that are manufactured prior to January 1, 2010 and may be held in inventory as of January 1, 2010. Stockpiled pre-charged appliance component parts, such as condensing units, line sets, evaporator coils, and compressors that are manufactured before January 1, 2010, may be used to service existing appliances. However, due to the use prohibitions in the companion rule, such pre-charged components cannot be configured to “manufacture” a new appliance, such as a new residential split system, if the “manufacture” involves any use of virgin HCFC–22 or HCFC–142b as a refrigerant. Such use would include the addition of virgin HCFC–22 or HCFC–
142b to complete the initial charge of the appliance and the use of virgin HCFC–22 or HCFC–142b in the components that are being assembled to create the appliance. EPA believes that distributors of pre-charged appliance components will continue to have access to HCFC–22 and HCFC–142b components that are needed to service appliances that were manufactured prior to January 1, 2010. EPA is allowing the sale of existing inventories of pre-charged components as well as the manufacture or import of replacement components if they are not charged with HCFC–22 or HCFC–142b. In addition, this rulemaking does not impact the manufacture, import, or distribution of appliances or components using SNAP-approved alternative refrigerants, such as R–410A.

EPA has also considered the role that future hydrofluorocarbon (HFC) controls may have on the impacts of today’s rulemaking. Depending on how any future HFC controls may affect availability of HCFC alternatives, the estimated effects of this rule may be over-stated or under-stated. EPA believes that any future domestic controls on the production and consumption of HFCs, if any, would provide for adequate time for a smooth transition to new alternatives. Therefore, EPA has decided to take action based on current Clean Air Act authority addressing HCFCs.

(ii) What Factors Will Influence the Costs of Pre-Charged Appliances Charged With Substitutes?

Costs to transition to another refrigerant for equipment currently pre-charged with HCFC–22 can be broken down to refrigerant costs and costs associated with manufacturing different equipment components. EPA has considered the transitional costs of moving away from pre-charged HCFC–22 appliances and components.

The primary alternative for pre-charged appliances using HCFC–22 or HCFC–142b is hydrofluorocarbon (HFC) blend R–410A. R–410A air-conditioning systems have been commercially available since 1995. As such, the fixed costs, such as the engineering redesign of certain components of equipment or the costs associated with converting facility manufacturing lines in those countries producing this equipment are not a major consideration. EPA feels that this is a reasonable assumption given that non-ODS alternatives already possess some of the current global and U.S. market share and therefore these costs have already been incurred to some extent; furthermore, facilities abroad (e.g., China, Mexico) are obligated regardless of U.S. regulations to transition their equipment manufacturing facilities to accommodate substitute refrigerants for their own domestic demand. This transition will occur sooner than previously planned given the decision made by the Parties to the Montreal Protocol in September 2007 to adjust the phasedown of HCFC production and import for both Article 2 (developed) and Article 5 (developing) countries. EPA believes that the price of the refrigerant is a comparatively small fraction of the total price of the air-conditioning and refrigeration appliances affected by this rule, ranging from 1 to 3 percent of total cost. EPA also believes that only a limited number of appliance components will be replaced to accommodate an alternative refrigerant. The decision by the Parties to the Montreal Protocol to adjust the phaseout schedules for HCFCs was based partly on reliable information concerning commercially available substitute refrigerants that has been provided to the Parties by technical assessment panels the Parties sponsor. For some applications, manufacturers have a suite of non-ODS alternatives from which to choose and can therefore consider a range of price and operational factors.

After U.S. production and import of bulk HCFC–22 for use in new equipment is banned on January 1, 2010, the supply of virgin HCFC–22 in the United States will decrease and the demand for reclaimed HCFC–22 and alternatives is expected to increase. Recent industry information indicates that these market shifts have been underway for some time, as evident by the introduction of HFC alternatives (e.g., R–410A), and the recent increases in the amounts of HCFC–22 being reclaimed. The accompanying HCFC allocation rule will also have the effect of restricting the supply of virgin HCFC–22 based on the projected servicing demand in 2010–2014, taking into account the amount of that demand that can be met through recycling and reclamation.

International markets for refrigerants may similarly follow U.S. market trends given the decision made by the Parties to the Montreal Protocol in September 2007 to adjust the phasedown of HCFC production and import for both Article 2 and Article 5 countries. With this change, developing countries (including China, a predominant exporter of HCFC–22 pre-charged appliances to the United States) are now subject to a freeze on HCFC–22 consumption in 2013 based on the average of 2009 and 2010 consumption levels with subsequent step downs in HCFC consumption from 2015 to 2040. As such, it can be reasonably expected that similar shifts in refrigerant pricing and overall transitions are likely to occur in developing countries with an increase in the price of HCFC–22 and a drop in the price of some ODS alternatives. For example, some foreign companies that produce pre-charged HCFC–22 appliances for the U.S. market have already been incented to begin making the long-term capital investments toward the transition to non-ODS alternatives sooner than they would otherwise have done, seeing the advantage of investing in alternatives early. This market strategy would likely have some impact on the economies of refrigerant pricing because the demand created for ODS alternatives by the U.S. market may lead to economies of scale in the countries producing the pre-charged equipment for export to the United States.

(iii) Impacts on the General Public

EPA considered whether the transition to alternative refrigerants in pre-charged appliances would involve differential costs. Considering that these appliances are not yet retrofitted, this would be an upstream cost occurring at the point of manufacture, not after consumer purchase. EPA’s evaluation, included in the docket for this rulemaking, examined potential consumer impacts from differences in refrigerant cost and differences in costs associated with changes to certain appliance components to accommodate an alternative refrigerant. Generally, the R–410A appliances are more energy-efficient than their HCFC–22 counterparts, which would result in reduction of energy usage by consumers and thus would result in a net savings. EPA assessed existing industry data and applied assumptions regarding future manufacturing and marketing trends. Several critical limitations associated with projecting differential refrigerant and component prices preclude the Agency from determining an incremental cost estimate with certainty.

Refrigerant prices vary widely based on factors such as volumes purchased and negotiation of purchasing contracts; further, projecting prices into the future is complicated by variability in individual manufacturers’ business decisions regarding when to make the long-term capital investments to alternative refrigerants. The more aggressive phasedown of HCFC–22 production and import resulting from the adjustment decision made at the 19th Meeting of the Parties is likely to lead to an increase in the price of
HCFC–22 and a drop in the price of R–410A. Prices of HCFC–22 will likely increase as the stepwise reductions in production and consumption continue. As the global phaseout of HCFCs continues, other international markets may become more restrictive, further influencing the global pricing.

Equipment charged with alternative refrigerants such as R–410A requires slightly different components—such as thicker-walled copper tubing—that may cost slightly more than the components used in older HCFC–22 appliances. EPA is not aware of any industry data now available that project the likely future differences in component costs between equipment designed for HCFC–22 and equipment designed for alternatives including R–410A, whether from manufacturers in developed countries or developing countries. EPA estimates that for appliances manufactured in the United States, incremental costs associated with component modifications could range from zero to 10 percent of the cost of the appliance—an estimated per-unit difference of $5 for smaller units and $45 for larger units. The cost differential for manufacturers in developing countries could be less or more, and the degree to which any such differential would be passed along to U.S. consumers is unknown. Given the caveats above, EPA estimates that the price differential could range from $40 to $50 (with a mid-range of $42.50) for each of the larger units (e.g., unitary air conditioners) that would be imported annually during the period 2010–2019, and that the differential for the smaller units (e.g., room air-conditioners) would range from $2 to $5 (with a mid-range of $3.50).

In the updated analysis included in the docket for this rulemaking, EPA states that on average 8.4 million appliances pre-charged with HCFC–22 were imported into the United States annually from 2006 to 2008. Applying assumptions identified in the docket concerning market growth, EPA estimates that the market for imported pre-charged appliances will grow to an annual average rate of 11 million appliances per year during the period 2010–2019. Thus, during the period 2010–2019, EPA projects that an average of 11 million appliances per year would be imported pre-charged with a non-ozone-depleting alternative refrigerant such as R–134a, R–407C, or R–410A. EPA’s analysis shows that the engineering modifications to pre-charged components of appliances using R–134a or R–407C are likely to have negligible cost. EPA has, however, calculated the incremental cost associated with the more significant modifications necessary for pre-charged appliances using R–410A. EPA estimates that these appliances will constitute approximately 64 percent of the pre-charged imports during this time, or approximately 7.1 million of the 11 million pre-charged units imported with alternative refrigerants on an annual basis during 2010–2019. The annual aggregate of such impacts would range from $40 to $50 million, with a mid-range estimate of $45 million.

In the NPRM, EPA requested comment regarding the assumptions on market, growth, and factors concerning costs, as cited in a draft memorandum Costs Associated with Refrigerant Substitution from R–22 to R–410A in Pre-charged Equipment, prepared by ICF Consulting for EPA. EPA received comments requesting a more detailed assessment of the State and future of the used, recovered, and reclaimed market, and factor those findings and costs into its overall estimates of the impacts of the rule on prices and the industry. EPA notes that assumptions on the future use of HCFCs needed in the service sector are addressed in the accompanying final rule titled “Protection of Stratospheric Ozone: Adjustments to the Allowance System for Controlling HCFC Production, Import, and Export” (EPA Docket: EPA–HQ–OAR–2008–0496).

One commenter estimated that the increased cost of this rule related to just imported room air-conditioners, portable air-conditioners, and dehumidifiers is several million dollars per manufacturer, including upfront costs such as redesigning of products and retooling of factories, as well as ongoing costs of higher cost components and refrigerant. The components of an R–410A unit can cost more than an equivalent R–22 unit. One commenter states that EPA should provide a more detailed assessment of availability and costs of alternative refrigerants and factor those findings and costs into its overall estimates on the impacts of the rule.

EPA recognizes that in addition to future changes in refrigerant pricing structures, changes in costs may also result from changes in equipment design. In most cases, appliances charged with common ODS alternatives will require different components than equipment charged with HCFC–22, such as thicker walled copper tubing, newly developed compressors, and other components capable of withstanding high pressures, all of which may cost slightly more than the components used in older HCFC–22. Industry expert opinion suggests that for appliances manufactured in the United States, the added cost to manufacturers that is likely to be reflected in the cost to consumers resulting from the component modifications currently may be anywhere from zero to ten percent of the cost of the appliances, an estimated difference of $2 to $5 for smaller units and $40 to $45 for larger units. EPA also notes that this rule only regulates U.S. interstate commerce and does not consider the costs of retooling foreign manufacturing plants. As previously stated assumptions on the future use of HCFCs needed in the service sector are addressed in the accompanying HCFC allocation final rule. Discussion of the impacts on foreign markets is discussed below.

(iv) Implications for Other Markets

EPA believes that there is an additional impact associated with not banning the sale and distribution in interstate commerce of these appliances as of January 1, 2010. EPA believes that prolonging U.S. domestic or imported pre-charged appliances would discourage global efforts to transition to non-ODS technologies in manufactured air-conditioning and refrigeration appliances. Given the commitments of the United States and its trading partners to ultimately phase out HCFCs, investment in alternative refrigerant product lines is occurring and will continue to occur globally. Production capacity requires a long-term capital investment and the choice of refrigerant dictates some of that investment in the form of factory tooling, design, and a network of suppliers for components. Without the ban contained in this rulemaking, investment decisions influenced by demand could foster continued investment in HCFC-based manufacturing rather than investment in alternatives and would run counter to the United States’ domestic approach to promote smooth transitions rather than a rush to transition at the end of the global phaseout. EPA has initiated the phaseout of HCFCs. However, the phaseout regulations do not address the sale and distribution of products that are pre-charged with HCFCs undergoing a phaseout. Without today’s final rule, domestic and foreign manufacturers as well as their distributors would face differing requirements. Foreign manufactured pre-charged products and appliances could continue to enter U.S. commerce charged with virgin HCFC–22 and HCFC–142b, thus increasing the service need for HCFC appliances in the United States and potentially resulting in shortages of_R–22 and HCFC–142b given the restrictions on production and consumption of these
III. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review

Under Executive Order (EO) 12866 (58 FR 51735, October 4, 1993), this action is a “significant regulatory action” because the Office of Management and Budget (OMB) believes that it may raise novel legal or policy issues. Accordingly, EPA submitted this action to OMB for review under EO 12866 and any changes made in response to OMB recommendations have been documented in the docket for this action.

B. Paperwork Reduction Act

This action does not impose any new information collection burden. Rather, this rule bans the sale or distribution of new air-conditioning and refrigeration appliances containing HCFC–22 or HCFC–142b containing one or both of these substances, beginning January 1, 2010. However, OMB has previously approved the information collection requirements contained in the existing regulations at 40 CFR part 82 under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. and has assigned OMB control number 2060-0498. The OMB control numbers for EPA’s regulations in 40 CFR are listed in 40 CFR part 9.

C. Regulatory Flexibility Act (RFA)

The Regulatory Flexibility Act (RFA) generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of today’s rule on small entities, a small entity is defined as: (1) A small business as defined by the Small Business Administration’s (SBA) regulations at 13 CFR 121.201; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of today’s final rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. The small entities directly regulated by this final rule include contractors and service companies such as plumbing, heating, and air-conditioning contractors; manufacturers of air conditioners and refrigerators, as well as distributors, merchants, and wholesalers of such equipment. This final rule will affect the following categories:

<table>
<thead>
<tr>
<th>Category</th>
<th>NAICS code</th>
<th>SIC code</th>
<th>Examples of regulated entities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractors and Servicing</td>
<td>238220</td>
<td>1711, 7623</td>
<td>Plumbing, Heating, and Air-Conditioning Contractors.</td>
</tr>
<tr>
<td>Manufacturers of air conditioners and refrigerators</td>
<td>333415</td>
<td>3585</td>
<td>Air-Conditioning Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing.</td>
</tr>
<tr>
<td>Air-Conditioning Equipment and Supplies Merchant Wholesalers</td>
<td>423620</td>
<td>5064</td>
<td>Air-conditioning (condensing unit, compressors) merchant wholesalers.</td>
</tr>
<tr>
<td>Electrical and Electronic Appliance, Television, and Radio Set Merchant Wholesalers</td>
<td>423730</td>
<td>5075</td>
<td>Air-conditioning (room units) merchant wholesalers.</td>
</tr>
<tr>
<td>Importers of air conditioners and refrigerators</td>
<td>333415</td>
<td>3585</td>
<td>Air-Conditioning Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing.</td>
</tr>
</tbody>
</table>

Although this final rule will not have a significant economic impact on a substantial number of small entities, EPA nonetheless has tried to reduce the impact of this rule on small entities. Small entities may continue to sell and distribute pre-charged appliances and appliance components that were manufactured prior to January 1, 2010. Therefore, small entities will not be burdened with the loss of stranded inventories. Such inventories may be sold indefinitely for the service of existing appliances.

New appliances entering the market after January 1, 2010 will rely on alternatives that have been found acceptable under EPA’s SNAP Program. Therefore small entities impacted by today’s rule (e.g., service contractors and wholesalers) will continue to have access to and be able to sell and distribute appliances and components that are pre-charged with alternatives to HCFC–22 and HCFC–142b. Similarly, this rulemaking does not ban the manufacture of components that are intended for the service of existing HCFC–22 or HCFC–142b appliances (i.e., appliances manufactured prior to January 1, 2010). Such components can continue to be sold and distributed in interstate commerce as long as they are not pre-charged with HCFC–22 or HCFC–142b.

D. Unfunded Mandates Reform Act

This rule does not contain a Federal mandate that may result in expenditures of $100 million or more for State, local, and tribal governments, in the aggregate, or the private sector in any one year. The requirements already established at § 82.16(c) make it unlawful to produce or import HCFC–22 or HCFC–142b on or
after January 1, 2010, for use in refrigeration or air-conditioning appliances manufactured on or after that date. The practical result is that domestic manufacturers of air-conditioning and refrigeration appliances will not be able to charge newly manufactured appliances with virgin or imported HCFC–22 or HCFC–142b, and thus will not be introducing appliances containing these newly produced substances into interstate commerce. Thus, this rule is not subject to the requirements of sections 202 or 205 of UMRA.

This rule is also not subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments. As stated above, this rule affects manufacturers of air-conditioning and refrigeration appliances, not small governments.

E. Executive Order 13132: Federalism

Executive Order 13132, titled “Federalism” (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure “meaningful and timely input by State and local officials in the development of regulatory policies that have Federalism implications.” “Policies that have Federalism implications” is defined in the Executive Order to include regulations that have “substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.”

This rule does not have Federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. Today’s rule is expected to primarily affect producers, importers, and exporters of air-conditioning and refrigeration appliances. Thus, the requirements of section 6 of the Executive Order do not apply.

F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications, as specified in Executive Order 13175 (65 FR 67249, November 9, 2000). This rule affects manufacturers of air-conditioning and refrigeration appliances, not tribal governments. Thus, Executive Order 13175 does not apply to this action.

G. Executive Order 13045: Protection of Children From Environmental Health and Safety Risks


This action supports the Agency’s efforts to reduce the potential continued use of class II controlled substances and the emissions of such substances. It supplements the United States’ commitment to reduce the total basket of HCFCs produced and imported to a level that is 75 percent below the respective baselines. This rule will reduce the number of appliances charged with HCFC–22 and HCFC–142b that, in the absence of this rulemaking, would continue to be sold and distributed in interstate commerce. Uncontrolled sale and distribution of such appliances and components would increase the service demand for HCFC–22 and HCFC–142b needed for the future service of such appliances. This action is one of the most significant remaining actions that the United States can take to complete the overall phaseout of ODS and further decrease impacts on children’s health from stratospheric ozone depletion.

H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use

This action is not a “significant energy action” as defined in Executive Order 13211 (66 FR 28355 [May 22, 2001]), because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. The regulation solely impacts the sale or distribution, or offer for sale or distribution of pre-charged appliances.

I. The National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (“NTTAA”), Public Law No. 104–113, 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards. This action does not involve technical standards. Therefore, EPA did not consider the use of any voluntary consensus standards.

J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

Executive Order (EO) 12898 (59 FR 7629 [Feb. 16, 1994]) establishes Federal executive policy on environmental justice. Its main provision directs Federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States. EPA has determined that this final rule will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations because it increases the level of environmental protection for all affected populations.
without having any disproportionately high and adverse human health or environmental effects on any population, including any minority or low-income population. By restricting the sale and distribution of appliances charged with HCFC–22 and HCFC–142b, emissions of these ozone-depleting substances will be avoided lessening the adverse human health effects for the entire population.

K. The Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801 et seq., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States prior to publication of the rule in the Federal Register. A Major rule cannot take effect until 60 days after it is published in the Federal Register. This action is not a “major rule” as defined by 5 U.S.C. 804(2). This rule will be effective January 1, 2010.

List of Subjects in 40 CFR Part 82

Environmental protection, Administrative practice and procedure, Air pollution control, Chemicals, Chlorofluorocarbons, Exports, Hydrochlorofluorocarbons, Imports, Reporting and recordkeeping requirements.


Lisa P. Jackson,
Administrator.

§ 82.302 Definitions.

As used in this subpart, the term: Appliance means any device which contains and uses a refrigerant and which is used for household or commercial purposes, including any air conditioner, refrigerator, chiller, or freezer.

Class I substance means any controlled substance designated as class I in 40 CFR part 82, appendix A to subpart A.

Class II substance means any controlled substance designated as class II in 40 CFR part 82, appendix B to subpart A.

Consumer, when used to describe a person taking action with regard to a product, means the ultimate purchaser, recipient or user of a product.

Distributor, when used to describe a person taking action with regard to a product, means:

(1) The seller of a product to a consumer or another distributor; or

(2) A person who sells or distributes that product in interstate commerce, including sale or distribution preceding export from, or following import to, the United States.

Hydrochlorofluorocarbon means any substance listed as class II in 40 CFR part 82, appendix B to subpart A.

Manufactured, for an appliance, means the date on which the appliance’s refrigerant circuit is complete, the appliance can function, the appliance holds a refrigerant charge, and the appliance is ready for use for its intended purposes; for a pre-charged appliance component, “manufactured” means the date that the original equipment manufacturer has physically completed assembly of the component, the component is charged with refrigerant, and the component is ready for initial sale or distribution.

Person means any individual or legal entity, including an individual, corporation, partnership, association, State, municipality, political subdivision of a State, Indian tribe; any agency, department, or instrumentality of the United States; and any officer, agent, or employee thereof.

Pre-charged appliance means any appliance charged with refrigerant prior to sale or distribution, or offer for sale or distribution in interstate commerce.

Pre-charged appliance component means any portion of an appliance including but not limited to condensers, compressors, line sets, and coils that is charged with refrigerant prior to sale or distribution or offer for sale or distribution in interstate commerce.

Product means an item or category of items manufactured from raw or recycled materials which is used to perform a function or task.

Refrigerant means, for purposes of this subpart, any substance consisting in whole or in part of a class I or class II ozone-depleting substance that is used for heat transfer purposes and provides a cooling effect.

§ 82.304 Prohibitions.

Effective January 1, 2010, no person may sell or distribute, or offer to sell or distribute, in interstate commerce any product identified in § 82.306.

§ 82.306 Prohibited products.

Effective January 1, 2010, the following products are subject to the prohibitions specified under § 82.304—

(a) Any pre-charged appliance manufactured on or after January 1, 2010 containing HCFC–22, HCFC–142b or a blend containing one or both of these controlled substances.

(b) Any pre-charged appliance component for air-conditioning or refrigeration appliances manufactured on or after January 1, 2010 containing HCFC–22, HCFC–142b, or a blend containing one or both of these controlled substances.

[FR Doc. E9–29560 Filed 12–14–09; 8:45 am]