Congressional Research Service
Informing the legislative debate since 1914

Legal Sidebar

D.C. Circuit Rejects EPA's Efforts to Ban Hydrofluorocarbons: Part 1

September 5, 2017

A divided panel of the U.S. Court of Appeals for the District of Columbia Circuit (D.C. Circuit) recently vacated part of an Environmental Protection Agency (EPA) rule promulgated in 2015 that would have prohibited manufacturers from using hydrofluorocarbons (HFCs), a class of greenhouse gases (GHGs), as substitutes for ozone-depleting substances (ODSs). Based on EPA's earlier decision to approve HFCs as acceptable ODS substitutes in specific uses, HFCs are currently used as replacements for ODSs in many products such as refrigerants in refrigerators and air conditioners. The court's decision raises questions about what authority EPA could use if the agency seeks to continue to regulate HFCs and how the United States may meet its international obligations should it ratify the Kigali Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer (Montreal Protocol), which seeks to reduce the production and use of HFCs. Part 1 of this two-part Sidebar series provides background on the U.S. implementation of the Montreal Protocol and analyzes the D.C. Circuit's opinion in *Mexichem Fluor, Inc. v. EPA*. Part 2 of the series discusses the potential implications of the court's decision.

Reducing Ozone-depleting Substances (ODSs) through the Montreal Protocol

The Montreal Protocol is an international agreement that aims to protect the stratospheric ozone layer by phasing out the production and use of ODSs. Depletion of the stratospheric ozone layer decreases absorption of ultraviolet solar radiation that can result in increased risks of skin cancers, cataracts, and harm to agricultural crops and marine life. The United States ratified the Protocol in 1988 and its four subsequent amendments with the advice and consent of the Senate. The most recent amendment to the Protocol was adopted in October 2016 in Kigali, Rwanda. Although HFCs are not considered ODSs, the Kigali Amendment adds HFCs to the list of substances to be phased down under the Montreal Protocol. According to EPA, "[l]ike the ODS[s] they replaced, HFCs are potent greenhouse gases that can be hundreds to thousands of times more potent than carbon dioxide (CO_2) in contributing to climate change. . . . If HFC growth continues on the current trajectory, the increase in HFC emissions is projected to offset much of the climate benefit achieved by phasing out ODS[s]."

In order for the U.S. to comply with its obligations under the Montreal Protocol, Congress amended the Clean Air Act in 1990 to regulate ODSs. With a few exceptions, Section 612 of the Clean Air Act requires

Congressional Research Service
https://crsreports.congress.gov
LSB10154

manufacturers to phase out their production and use of certain ODSs by 2015. Section 612(a) establishes a "safe alternatives policy" that requires that ODSs "be replaced by chemicals, product substitutes, or alternative manufacturing processes that reduce overall risks to human health and the environment." To implement this policy, EPA established the Significant New Alternatives Policy (SNAP) regulatory program.

Under the SNAP program, EPA publishes lists of acceptable and unacceptable substitutes for specific uses of ODSs. Under Section 612(c), EPA is required to list an ODS substitute as unacceptable if it finds other alternatives that reduce the "overall risk to human health and the environment" and are currently or potentially available for use in products. Others can petition EPA to add or remove substances from these lists. In 1994, EPA approved certain HFCs as acceptable substitutes for ODSs used in specific products, including aerosols, motor vehicle air conditioners, commercial refrigerators, and foams. As a result, manufacturers replaced ODSs with HFCs in these products.

2015 SNAP Rulemaking

In response to two petitions requesting EPA tochange the listing status of substances with high global warming potential (GWP), EPA issued a new rule in 2015 finding that non-HFC substitutes for ODSs posed lower overall risk than HFCs to health and the environment based in part on its assessment of the GWP and climate change effects of HFCs compared to other alternatives. Based on that finding, EPA moved certain HFCs with high GWP to the unacceptable list and established deadlines for phasing down the use of these HFCs in air conditioning, refrigeration, aerosols, and foams. In the same rulemaking, EPA approved several HFC alternatives on the acceptable substitutes list. The change in the HFCs' listing status resulted in two main prohibitions. First, manufacturers using ODSs would be prohibited from replacing those substances with HFCs on the unacceptable list. Second, manufacturers that have already substituted ODSs for HFCs would no longer be able to use unacceptable HFCs in products identified in the rulemaking after a period of time.

Legal Challenge to the 2015 SNAP Rule

Two manufacturers that produce HFCs for use in various products filed a petition of review in the D.C. Circuit challenging the 2015 SNAP rule in *Mexichem Fluor, Inc. v. EPA*. The petitioners' central argument was that EPA lacked the authority to prohibit manufacturers from using HFCs in various applications if those manufacturers already replaced banned ODSs with HFC substitutes that were previously approved by EPA.

In a 2-1 split decision, the majority of the D.C. Circuit panel sided with the petitioners, holding that "EPA's authority to regulate [ODSs] under Section 612 and other statutes does not give EPA authority to order the replacement of substances that are not ozone depleting but that contribute to climate change." The majority opinion, authored by Judge Kavanaugh and joined by Judge Brown, acknowledged that EPA has authority under Section 612 to reclassify HFCs as unacceptable substitutes based on its assessment of the general public health and environmental risks associated with HFCs. As a result, EPA could lawfully prohibit a manufacturer from substituting HFCs for ODSs currently used in their products. However, the majority concluded that EPA did not have authority to require manufacturers that previously switched ODSs with HFCs to substitute those HFCs with a more climate-friendly alternative.

The majority's decision rested on its interpretation of the term "replace" in Section 612(c) that provides that it is "unlawful to replace" an ODS with a substitute that EPA determines is unacceptable. The majority determined that the "sufficiently clear" and "ordinary meaning" of the term "replace" refers to a one-time substitution, explaining that:

> [M]anufacturers "replace" an ozone-depleting substance when they transition to making the same product with a substitute substance. After that transition has occurred, the replacement has been effectuated, and the manufacturer no longer makes a product that uses an ozone-depleting substance. At that point, there is no ozone-depleting substance to "replace".

The majority also voiced concerns that EPA's interpretation of the statute was contrary to previous agency guidance that stated that Section 612(c) does not authorize replacement of non-ODSs. More broadly, the majority looked at the legislative history of Section 612(c) to support its conclusion that Congress did not intend for EPA to regulate non-ODSs that contribute to climate change under a statute with a "focus" on ODSs.

The dissenting opinion written by Judge Wilkins, noted that the congressional intent of the term "replace" as used in Section 612 was ambiguous and could signify an ongoing replacement process in which the manufacturer "replaces" an ODS in a product with an acceptable substitute every time that product is made or sold. In this vein, Judge Wilkins argued that EPA's interpretation of the statute was a reasonable one that had the force of law.

Although the panel was split regarding EPA's authority to require replacement of HFCs, the D.C. Circuit panel unanimously rejected petitioners' claim that EPA's assessment and decision to remove HFCs from the list of acceptable ODS substitutes were arbitrary and capricious. Notably, in upholding EPA's comparative risk assessment and conclusions, the court accepted the GWP and climate change effects as criteria EPA may "reasonably" consider in its evaluation of atmospheric effects and health and environmental impacts of ODS alternatives under the SNAP program.

The court vacated and remanded the provision in the 2015 SNAP Rule that would require manufacturers to replace HFCs as with another substitute. It remains unclear what other legal options EPA may pursue to regulate HFCs. Part 2 of this Sidebar series will discuss those options and implications related to the Kigali Amendment of the Montreal Protocol.

Author Information

Linda Tsang
Legislative Attorney

Disclaimer