FRED UPTON, MICHIGAN
CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY
RANKING MEMBER

ONE HUNDRED FOURTEENTH CONGRESS

Congress of the United States

House of Representatives

COMMITTEE ON ENERGY AND COMMERCE
2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515–6115
Majority (202) 225–2927
Minority (202) 225–3641

April 1, 2015

The Honorable Gina McCarthy
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Dear Administrator McCarthy:

I write regarding the Environmental Protection Agency's August 6, 2014, proposed rulemaking, "Protection of Stratospheric Ozone: Change of Listing Status for Certain Substitutes Under the Significant New Alternatives Policy Program," published at 79 Fed. Reg. 46126, which would restrict many commonly used hydrofluorocarbons (HFCs). In the 1990s, HFCs were approved under the Clean Air Act as environmentally acceptable substitutes for banned ozone depleting substances, but with this action, EPA is now targeting HFCs as greenhouse gases and proposing to prohibit their use in a number of important applications.

There are significant concerns about the consequences of the proposed rule, and I write specifically to request additional information relating to this rulemaking. As discussed below, I understand the consensus among the affected companies in the refrigeration, motor vehicle, and insulation industries is that the proposed compliance requirements are not feasible, would cause considerable economic harm and job losses, and may increase rather than reduce risks to the American public. In addition, I believe that the proposed rule is an unlawful attempt by EPA to set global warming policy using Clean Air Act authority not intended for that purpose.

I. The Proposed Rule's Compliance Challenges

A. Unrealistic Deadlines

Many of the implementation difficulties of the proposed rule stem from its highly compressed compliance timeframes under which regulated companies must modify their products to use HFC alternatives. I understand that few of these companies believe that compliant products can be designed, tested, certified, and manufactured under the proposed schedule. EPA relies primarily on the President's Climate Action Plan, and in particular its stated goal of leading the world on HFC restrictions, as the agency's justification for the rule as

proposed. However, the tight deadlines are not required under any of the relevant statutory provisions, and they may in fact violate the law by imposing more costs than benefits.

The January 1, 2016 deadline for commercial refrigeration equipment is among the most problematic aspects of the proposed rule. I understand that manufacturers of this equipment are in near-unanimity that replacing HFCs as refrigerants by this date is impossible. EPA asserts that acceptable alternatives can quickly replace the delisted HFCs with minimal modifications, but in most cases the proposed rule will necessitate major product redesigns. The same is true for the proposed January 1, 2017 deadline for using HFCs as foam blowing agents for insulation. For these applications, many additional years would be required to develop and deploy satisfactory substitutes. It should be noted that there are some HFC blends not prohibited by the proposed rule that may allow for an easier transition, but their use as substitutes is problematic given that they may be the target of subsequent EPA rules.

For motor vehicle air-conditioners, EPA's proposed HFC delisting takes effect with the 2021 model year. Although this transition period is longer than the others under the proposed rule, automakers have noted in their filed comments that it still poses problems, especially given their long product development cycles and the extensive air-conditioner redesigns necessary to use substitutes. EPA downplays the costs by claiming that automakers are likely to replace HFCs anyway under the existing National Program for Model Year 2017-2025 CAFE and GHG Standards (CAFE/GHG rule) finalized in 2012. However, under the CAFE/GHG rule, automakers are given the flexibility to earn compliance credits via several means, only one of which is the replacement of HFC refrigerants with compounds having a lower global warming potential (GWP). The proposed rule eliminates this flexibility and requires that all vehicle models – including those for which a transition away from HFCs would not make economic sense – switch to new refrigerants by 2021. Many automakers also believe that the only feasible alternative under this timeframe is a proprietary compound that currently costs about 20 times more than the HFCs it would replace and for which adequacy of future supplies is uncertain.

B. Potential Conflicts With Other Regulations

For the refrigeration sector, the rapid introduction of new refrigerants and insulation under the proposed rule is further complicated by a separate set of Department of Energy (DOE) efficiency standards impacting some of the same equipment. This includes a residential refrigerator standard that took effect this year as well as standards applicable to several categories of commercial refrigeration equipment that will take effect in 2017. By limiting the choices of available refrigerants and foam blowing agents, the proposed rule has many manufacturers concerned about achieving DOE's required energy efficiency gains. In fact, some of the HFCs now targeted by EPA are being used precisely because of their efficiency, and DOE assumed their continued availability in promulgating its standards.

Furthermore, EPA and DOE have apparently made no attempt to coordinate the implementation deadlines of rules affecting the same products. Since both agencies' rules necessitate expensive product redesigns that can take several years, the absence of harmonized deadlines has greatly exacerbated the compliance burden. For example, residential refrigerator manufacturers just completed the years-long process of redesigning their products to meet the

new DOE efficiency standard. If the proposed EPA rule is finalized, many manufacturers will be forced to undertake another redesign because the foam blowing agents chosen to help meet DOE's requirements will no longer be allowed in 2017.

The products covered by the proposed EPA rule may fall within the jurisdiction of other federal agencies in addition to DOE. For example, replacements for HFC-using medical and laboratory equipment must comply with a number of Food and Drug Administration regulations, and covered products used on boats must be approved by the United States Coast Guard. Also, the workplaces affected by the proposed rule must comply with all applicable Occupational Safety and Health Administration requirements. This adds to the cumulative regulatory burden and complicates adherence to the proposed rule's strict deadlines.

C. Concerns With Alternatives

Throughout the proposed rule, EPA focuses on addressing the perceived risks posed by the continued use of HFCs, but the agency downplays the fact that the alternatives present risks of their own. Most notably, there are several product categories for which the only realistic alternatives are flammable hydrocarbons. This creates potential safety concerns as well as additional regulatory hurdles in the manufacture, installation, use, maintenance, and disposal of affected products.

Manufacturers switching to flammable refrigerants or foam-blowing agents must undertake extensive and costly changes at their production facilities to reduce the risks to employees. The products using flammable compounds will have to be redesigned and certified to comply with a host of regulatory requirements. This includes strict limits on the amount of flammable refrigerant allowed in each piece of equipment, which can constrain their size and cooling capacity. Equipment containing flammable compounds must also comply with all applicable fire and building code provisions, and may impact insurance rates. Much of the compliance burden will fall on small businesses that are end users of refrigeration equipment, as well as schools, hospitals and other public buildings.

Even with extensive precautions, the risks of using flammable compounds can never be completely eliminated. For example, there may be increased potential risks to employees and customers from flammable refrigerants used in a restaurant kitchen near open flames for cooking. These risks also extend to those who service this equipment, and the additional training and procedures necessary to reduce these risks will likely add to repair costs.

Beyond flammability, some HFC alternatives raise toxicity and other safety concerns that have not yet been fully assessed. Moreover, many substitutes are also volatile organic compounds (VOCs), and their use in the production of refrigeration equipment and insulation could lead to potential violations of other EPA regulations addressing ground-level ozone. Addressing all of the risks posed by HFC alternatives will necessitate much more transition time than is provided in the proposed rule.

II. Costs of the Proposed Rule

EPA's preliminary analysis of the proposed rule projects costs no higher than $30.5 million. This estimate greatly understates the difficulties of replacing the delisted HFCs by the proposed deadlines. In sharp contrast to EPA's cost estimates, a September 10, 2014 White House press release on HFCs announced that the member companies of the Air Conditioning, Heating, & Refrigeration Institute "will commit to spending $5 billion in new R&D and capital expenditures to develop and commercialize low global warming potential (GWP) technologies over the next ten years." This commitment by just one affected trade association to spend 160 times more than EPA's cost estimate strongly suggests that the transition away from HFCs will be considerably more expensive than the agency has assumed. In addition, I understand that at least one company has estimated that its own compliance costs will be considerably higher than EPA's projected total for all affected entities, casting further doubt on the plausibility of the agency's analysis.

As a consequence of its low cost estimate, EPA asserts that the Regulatory Flexibility Act does not apply because the proposed rule does not have a significant economic impact on a substantial number of small entities. The agency does not fully acknowledge the challenges to small manufacturers, many of whom lack the resources to handle such an abrupt product overhaul and thus will face even greater difficulties than larger manufacturers. In fact, a number of small manufacturers have expressed fears of closures and job losses as a consequence of the proposed rule. The agency also dismisses as negligible the impacts on the million or more small business end users of affected products such as restaurants and convenience stores. In reality, many small entities are concerned not only about the potentially higher purchase price of compliant equipment, but also higher ongoing costs such as more expensive maintenance and repairs, as well as ancillary costs like increased insurance rates and rents. The service technician community would also face many challenges dealing with compliant equipment. I believe there is no question that a substantial number of small entities will be significantly impacted.

The proposed rule would also apply to American exports of motor vehicles and other affected products. This may place these exports at a global disadvantage and threaten the jobs associated with them. Most nations have no plans to impose HFC restrictions like those in the proposed rule. This creates a dual disadvantage for American products sold abroad: compliance with the proposed rule may drive up the price of American-manufactured goods, while foreign markets without similar HFC restrictions are unlikely to have access to the infrastructure and technical capability to service equipment using new alternative compounds. Meanwhile, HFC-using motor vehicles and other goods from non-U.S. manufacturers will remain available in these markets for the foreseeable future.

Ultimately, American consumers would bear much of the cost of the proposed rule. Motor vehicle buyers may have to contend with costlier air-conditioners. Some types of insulation may become less effective, potentially adding to energy bills. Indirectly, food prices may increase, as every step in their processing, transportation, storage and retailing that requires refrigeration may become more expensive. Beyond costs, the quality and reliability of impacted products may suffer, and choices may be reduced. Public safety may also be compromised.

III. Environmental Consequences of the Proposed Rule

EPA treats the contribution of HFCs to global warming as the overriding consideration in the proposed rule, but even the agency would have to acknowledge the proposed rule would make an extremely small contribution to addressing it. In pursuing the administration's climate change agenda, EPA has thus far focused most of its attention on carbon dioxide rather than HFCs. The agency concedes that HFCs currently account for only 1.5 percent of greenhouse gas emissions and "are a small part of the problem today." Thus, there is little justification for the precipitous delisting of HFCs. And although EPA and others project HFC usage and emissions to increase in the decades ahead, most of that growth is expected from developing nations not subject to the proposed rule.

EPA estimates that the proposed rule would reduce HFC emissions by 31 to 42 million metric tons carbon dioxide equivalent in 2020, and 88 to 117 million in 2030. To place those figures in perspective, the above-mentioned CAFE/GHG rule was estimated to reduce greenhouse gas emissions by 2 billion metric tons carbon dioxide equivalent over the life of the vehicles regulated by the rule. And that rule was assessed by EPA to have a negligible impact on temperatures (an EPA-estimated 0.0074 to 0.0176 degree Celsius reduction by 2100). Indeed, EPA Administrator Gina McCarthy has conceded that the CAFE/GHG rule was among those whose impact on the climate would likely be too small to detect. EPA did not estimate the temperature reduction from the proposed HFC rule as the agency did with CAFE/GHG, but it would presumably be very minor.

Further, the proposed rule's modest reductions in greenhouse gas emissions may be at least partially offset by other emissions increases. Most of the greenhouse gas contribution from refrigeration systems is associated with the carbon dioxide emissions attributable to their energy use and not with leaked refrigerants and foam blowing agents. As discussed previously, many manufacturers are concerned that the proposed rule may necessitate the use of less energy efficient refrigerants and less effective insulation relative to HFCs, resulting in increased energy use and thus higher carbon dioxide emissions. The likelihood of such counterproductive results is greatly increased by the abrupt deadlines, which do not provide nearly enough time to optimize the energy efficiency of new systems using HFC alternatives. In addition, the increased cost of compliant equipment may encourage owners of old and less efficient systems to keep them in use longer rather than replace them. Similarly, for foam-blown insulation used in buildings, any reduction in effectiveness would result in increased carbon dioxide emissions, as would any increase in insulation cost that leads to reduced usage.

Overall, given the miniscule global warming impact of the proposed HFC restrictions, and the very real problems associated with a rush toward phasing out HFCs, it appears that the proposed rule would, on balance, not be effective in meeting the primary objective of addressing global warming.

IV. Questions About Legal Authority

The proposed rule is being promulgated pursuant to Subchapter VI of the Clean Air Act Amendments of 1990, entitled "Stratospheric Ozone Depletion" ("Title VI"). As the title indicates, this subchapter addresses those compounds listed as ozone depleting substances. It contains no specific authority to address global warming. In fact, the only mention of global

warming in Title VI states that the global warming potential of a listed substance "shall not be construed to be the basis of any additional regulation under this chapter."

Title VI sets out the process by which EPA approves alternatives to the class I or class II ozone depleting substances that were being phased out. Under these provisions, it is unlawful:

> "to replace any class I or class II substance with any substitute substance which the Administrator determines may present adverse effects to human health or the environment, where the Administrator has identified an alternative to such replacement that-
> (1) reduces the overall risk to human health and the environment; and
> (2) is currently or potentially available."

It was pursuant to these provisions that EPA developed the Significant New Alternatives Policy (SNAP) program in 1994 and approved HFCs as non-ozone depleting substitutes for class I or class II substances.

By now, the process of replacing ozone depleting substances is virtually complete. With very few exceptions, they are no longer used in newly manufactured products. At this point, the SNAP program should not be expanded an additional step to replace previously-approved alternatives to ozone depleting substances. For this reason, as a general matter, the proposed rule seeking to delist HFCs based on their global warming potential does not appear to be authorized under the Clean Air Act.

There are also many specific legal issues with the proposed rule. For example, given the modest benefits and significant problems with EPA's chosen deadlines to delist HFCs, it is doubtful that the agency has met its requirement of reducing the overall risk to human health and the environment. And given that EPA had previously approved HFCs as acceptable under SNAP, it is far from clear that the agency has adequately justified its reversal in now deeming HFCs unacceptable. Nonetheless, as a threshold matter, EPA has no express statutory authority to regulate HFCs as greenhouse gases.

In view of these concerns, please respond to the following questions by May 1, 2015:

1. What is the justification for the short compliance timeframes in the proposed rule?

    a. Did EPA consider less stringent deadlines, and if so, why were they rejected?

    b. Are the proposed rule's tight deadlines mandated under the Clean Air Act, or were they chosen at the discretion of EPA?

    c. Given that EPA believes that the HFCs addressed under the proposed rule are currently responsible for only 1.5 percent of anthropogenic warming and "are a small part of the problem today," why do they need to be targeted so quickly?

d. Does EPA agree that extending the deadlines by several years would considerably reduce the compliance difficulties and costs for regulated entities?

2. For the CAFE/GHG rule, EPA calculated the extent that future temperatures and sea levels would be reduced as a consequence of that rule. Using the same methodology, what is the estimated reduction in future temperatures and sea levels attributable to the proposed rule?

    a. Would the future temperature and sea level impact of the proposed rule be appreciably different if the deadlines were delayed by 5 or 10 years? If so, by how much?

    b. Is it possible that a delay in the compliance deadlines by 5 or 10 years would substantially reduce the costs associated with the proposed rule while having only a de minimis marginal climate impact?

    c. Has EPA taken into account the potential for the proposed rule to result in increased carbon dioxide emissions if the substitutes for HFCs prove to be less energy efficient and/or more expensive? If so, please provide the analysis used in the proposed rule.

3. Given that the proposed rule affects products that are also targeted by Department of Energy rules, has EPA coordinated with DOE in promulgating the proposed rule? If so, please provide the details of any coordination.

    a. Does EPA see any potential conflicts between the proposed rule and DOE energy conservation standards? If so, please explain the steps taken to reduce potential conflicts, including efforts to harmonize compliance deadlines.

    b. Has EPA coordinated with other federal agencies that also regulate the products and workplaces affected by the proposed rule?

    c. Has EPA considered whether regulated entities will have sufficient time to complete all of the testing and certifications necessary to comply with applicable federal regulations by the deadlines in the proposed rule? If so, please list the applicable regulations and the amount of time EPA believes will be needed for regulated entities to comply with them.

    d. What actions has EPA taken to comply with the executive orders and memoranda requiring improved coordination and harmonization of multiple regulations affecting the same industry, including Executive Order 13563 requiring agencies to consider cumulative regulatory burdens, and the March 20, 2012 Office of Information and Regulatory Affairs memorandum requiring better coordination of the timing, content, and requirements of multiple rulemakings affecting a particular industry?

4. Does EPA anticipate increased use of flammable hydrocarbons as refrigerants and foam blowing agents as a consequence of the proposed rule?

    a. Does EPA agree that a transition from non-flammable to flammable compounds increases safety risks for manufacturers, small business owners, and consumers?

    b. Does EPA believe that the technical, legal, and regulatory issues raised by the use of flammable compounds can be resolved in time to meet the deadlines in the proposed rule?

    c. Has EPA considered the additional costs to small business end users of equipment containing flammable compounds?

5. Is EPA in the process of revising its estimate that the proposed rule would cost no more than $30.5 million dollars?

    a. If not, how does EPA reconcile its estimate with the stated commitment by the Air Conditioning, Heating, & Refrigeration Institute to spend $5 billion dollars developing and deploying HFC substitutes?

    b. Does EPA believe that no manufacturers will be forced to scale back production or shut down as a consequence of the proposed rule, and that no jobs will be lost?

    c. Does EPA believe that a substantial number of small entities (including small business manufacturers, end users, and service technicians) will not experience a significant economic impact as a consequence of the proposed rule and thus that a SBREFA panel is not necessary? If so, what communications with small entities is that determination based upon?

    d. Has EPA considered the potential economic impact of lost export revenues attributable to the proposed rule?

6. What Clean Air Act or other statutory provision does EPA rely upon in proposing to regulate HFCs based on their global warming potential?

    a. Does EPA consider HFCs to be either a class I or class II ozone depleting substance as defined in Subchapter VI of the Clean Air Act Amendments of 1990? If not, how can the provisions in Subchapter VI for replacing class I or class II substances be applied to HFCs?

    b. Does EPA believe that the proposed rule would reduce the overall risk to human health and the environment? If so, how did the agency weigh the positive and negative impacts of the proposed rule to arrive at that conclusion?

    c. Given that EPA previously approved HFCs as acceptable under SNAP, what new evidence supports the proposed status change to unacceptable?

Should you have any questions, please contact Ben Lieberman or Mary Neumayr of the majority committee staff at (202) 225-2927.

Sincerely,

Ed Whitfield
Chairman
Subcommittee on Energy and Power