Comments on EPA's Proposed Revisions to the Refrigerant Management Program under Section 608 of the Clean Air Act

November 5, 2018

These comments are submitted on behalf of the Environmental Protection Network (EPN). EPN is an organization comprised of over 350 EPA alumni volunteering their time to protect the integrity of US EPA, human health and the environment. We harness the expertise of former US EPA career staff and confirmation-level appointees to provide an informed and rigorous defense against current efforts to undermine the protection of public health and the environment.

On October 1, 2018, EPA ("the agency") proposed a revision ("the proposed rule" or "proposal") to the Refrigerant Management Program. This proposal would relieve businesses from having to conduct leak inspections, repair leaks, and keep records for refrigeration and air conditioning equipment containing hydrofluorocarbons (HFCs) or any other refrigerant that is a substitute for an ozone-depleting substance (ODS).

We disagree with the proposal for the following reasons:

1. Proposal is Contrary to Statutory Language/Intent

Section 608(c) of the Clean Air Act ("the Act") prohibits the knowing venting, release or disposal of ODS refrigerants *and their substitutes* in the course of maintaining, servicing, repairing, or disposing of appliances or industrial process refrigeration (emphasis added).

The agency's fact sheet on the program is clear on this:

> "Section 608 prohibits individuals from intentionally venting ODS refrigerants (including CFCs and HCFCs) and their substitutes (such as HFCs), while maintaining, servicing, repairing, or disposing of air conditioning or refrigeration equipment."[1]

Under Sections 608(c)(1) and (c)(2), the Administrator can grant exemptions from this venting prohibition for *de minimis* releases of ODS and substitute (non-ODS) refrigerants, respectively. Section 608(c)(2) also allows the Administrator to exempt a substitute non-ODS refrigerant if the venting, release, or disposal of the substitute refrigerant "*does not pose a threat to the environment.*"

All refrigerants, including non-ODS substitutes, pose some threat to the environment. Over more than two decades under the Significant New Alternatives Policy (SNAP) program, the agency has established conditions for, and in some cases prohibited the use of, substitute non-ODS refrigerants including ammonia, carbon dioxide (CO_2), hydrocarbons, hydrofluorethers (HFOs) and hydrofluorocarbons (HFCs) based on environmental or health risks.

The agency does propose to apply the venting prohibition in cases where an individual directly releases non-ODS refrigerant (although enforcement will be virtually impossible and likely to be non-existent given current resources and priorities). For the vast majority of refrigerant emissions that occur during normal equipment operations, the agency fails to provide a rationale on how eliminating leak detection and repair requirements non-ODS substitute refrigerants under Section 608(2)(c) does not pose a threat to the environment and public health.

[1] https://www.epa.gov/sites/production/files/2018-09/documents/section_608_of_the_clean_air_act.pdf

2. Proposal Arbitrarily Reverses Prior Policy Without a Clear Rationale

While the agency reasonably asserts its authority to revisit existing regulations and interpretations, EPA fails to provide a clear explanation why it is reversing prior rulemakings and long-established policy.

Beginning in 1994, the agency has issued at least 10 separate regulations governing refrigerant management under Section 608. While several of these rulemakings only dealt with ODS refrigerants, or specific aspects of the overall program (e.g., de minimis exemptions), the agency has been completely consistent on one key interpretation: that topping off of refrigerant in leaky equipment constitutes knowledge that the system has a leak.

Under 40 CFR Part 82 Subpart F, the agency established allowable leak rates for ODS refrigerants for particular types of appliances. An individual adding refrigerant to a system that exceeds the applicable, allowable leak rate without fixing the leak(s) has been considered to be knowingly releasing refrigerant to the environment in violation of the venting prohibition. These limits have been aggressively enforced by the agency for more than two decades. Under this proposal, the agency is now abandoning this interpretation only for non-ODS substitute refrigerants (i.e., ammonia, CO2, HFCs, HFOs, hydrocarbons), but not for ODS refrigerants.

The agency attempts to explain this sudden shift by claiming that leaks of exempt refrigerants occur during normal equipment operations, at times that are "too distinct" from the activities identified in section 608(c)(2) (maintaining, servicing, repairing, disposing) to "provide EPA with regulatory authority to extend the leak repair regulations to non-exempt substitute refrigerants" (83 FR 49338).

The logical disconnect is that the agency is maintaining that for ODS refrigerants, leaks occur during normal operations and that those leaks somehow occur at times that, to paraphrase EPA's language, are "not too distinct" from the activities identified in section 608(c)(2). The rationale for this argument appears to be arbitrary with no technical basis given. We are unable to conceive of any plausible reason why topping off a leaking ODS-based system results in "practical certainty" that there would be subsequent, "knowing" release of refrigerant, but that topping off a leaking non-ODS based system would not have the identical "practical certainty" and would not constitute a "knowing release."

3. Proposal Creates Industry Confusion

For over two decades, the agency has sought to establish and maintain a cohesive and comprehensive refrigerant management program. Whether a system contains ODS or non-ODS substitute refrigerant, there are largely the same types of equipment and training necessary for proper servicing and maintenance, and the industry has responded with new technologies, education and certification programs for thousands of technicians, effective reporting and recordkeeping systems, and other compliance efforts. With the October 2018 proposal, the agency has suddenly and without clear rationale, created uncertainty about how refrigerants should be managed across the industry. Businesses and individual technicians who have been previously equipped and trained to monitor and repair refrigerant leaks would be, under this proposed rule, let off the hook for HFC, HFO, and hydrocarbon-based equipment.

With this proposal, while ostensibly relieving regulatory burden in the short-term, EPA is creating confusion which will likely increase costs over the longer-term. Given the importance of maintaining refrigeration and air conditioning performance to the bottom line of businesses and individuals across the economy – residences,

commercial office buildings, food processing and storage, supermarkets, restaurants, hotels, airports, etc., and the risks associated with improperly maintained equipment and atmospheric releases of HFCs, HFOs, and hydrocarbons, we expect there will be continuing focus on refrigerant management practices, even in the absence of a federal program. However, these efforts would be highly variable, without standardization, creating liability for thousands of small and large businesses.

4. Proposal Ignores Science on HFCs

For over a decade, culminating in the 2016 Kigali Amendment to the Montreal Protocol, the United States under multiple Administrations advocated for a global phasedown of HFCs because of their immediate threat to the earth's climate system. The scientific consensus on HFCs did not suddenly change in 2018. HFCs are still in widespread and growing use in refrigeration and air conditioning equipment and HFCs are still powerful greenhouse gases, with global warming potentials hundreds to thousands times greater than CO_2 on a per pound basis.

The proposal fails to acknowledge these facts. Instead, the agency now presents a convoluted set of arguments that side-steps the obvious and well-publicized motivation by the current Administration to de-regulate climate pollutants, including HFCs.

5. Economic Analysis is Flawed

EPA claims that the proposal would save $39 million per year by removing the requirement for businesses to inspect and repair leaks in appliances containing non-ODS substitute refrigerants, and eliminate associate recordkeeping costs.[2] The agency estimates that these cost savings would be partially offset by additional expenditures of $15 million per year for refrigerant needed to recharge leaky equipment.

The logic underlying EPA's modeling is flawed. EPA is assuming that leaky equipment would require repairs each year, resulting in ongoing costs over an indefinite period. In reality, repairing a leaky refrigeration or air conditioning appliance, or a refrigeration system, when done properly, should be done once or at most infrequently, resulting in savings in the form of avoided refrigerant over a long period of time. As a result, the agency significantly over-estimates the cost savings of the proposal relative to the additional costs.

The agency also fails to account for the costs associated with the additional refrigerant emissions that the proposal would cause. The preamble estimates the proposal would increase greenhouse gas emissions of 2.9 MMTCO2e per year – we are assuming this is accurate although we have not reviewed the agency's Regulatory Impact Analysis. Likewise, we are not familiar with the current policy from OMB on how to value GHG emissions as the guidance appears to be in flux. We assume that the social cost of carbon established under the Obama Administration of $40 per MMTCO2e is not accepted under the current Administration. Using a more conservative "market value" of carbon, e.g., $15 per ton based on California/Ontario's cap-and-trade market, yields an estimate of $43 Million per year in additional costs associated with the GHG emissions projected under the proposal.

The agency has failed to account not only for the additional costs associated with HFC greenhouse gas emissions, but has failed to account for additional emissions of other refrigerants with zero or low global

[2] If the proposal was extended to eliminate the entire Subpart F requirements for non-exempt non-ODS substitutes, including the requirement for self-sealing small cans, EPA estimates total savings of $43 million annually.

warming potential including ammonia, CO_2, hydrocarbons, and HFOs. All of these refrigerants pose threats to human health at high exposure levels and which would be more likely to be undetected because of the proposal.

In sum, the agency proposes that businesses would not be required to monitor and repair leaks of refrigerants that are not ozone depleting substances. A technician that continues to recharge a leaking system that uses HFC refrigerant or other non-ODS substitute refrigerant would not be subject to the venting prohibition that would still apply to systems that are leaking ODS refrigerant. This reversal in long-standing agency policy appears to be arbitrary, contrary to statutory intent and without scientific basis, increasing environmental threats, while creating confusion and ultimately additional liabilities and costs to industry and to society that the agency has not accounted for.

Respectfully submitted on behalf of the Environmental Protection Network,

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