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Ms. Hada Flowers
Regulatory Secretariat
General Services Administration
1800 F Street NW, 2nd Floor
Washington, DC 20405

Attention: FAR Case 2014-026; Docket #2014-0026

**Re: Comments of the Environmental Investigation Agency Concerning
the Proposed Federal Acquisition Regulation; High Global Warming
Potential Hydrofluorocarbons (HFCs)**

Dear Ms. Flowers:

The Environmental Investigation Agency (EIA) appreciates the opportunity to comment on the proposed rule by the Department of Defense (DOD), General Services Administration (GSA), and National Aeronautics and Space Administration (NASA) to amend the Federal Acquisition Regulation (FAR) to implement Executive branch policy in the President's Climate Action Plan (CAP) to procure, when feasible, alternatives to high global warming potential (GWP) hydrofluorocarbons (HFCs) (hereinafter "Proposed Rulemaking"). EIA commends the DOD, GSA, and NASA for working to initiate the President's CAP in the proposed rulemaking. EIA supports the objective of the proposed rulemaking, and believes there is opportunity for the rulemaking to be strengthened to further encourage a transition to low-GWP climate-friendly alternatives.

EIA is an independent campaigning organization working worldwide to protect the global climate, forests and threatened species. As part of our work, we have undertaken groundbreaking investigations into the illegal trade in ozone depleting substances ("ODS") in the mid-1990s and have been closely involved in the international ozone and climate negotiations for more than a decade. Since 2008, EIA's climate campaign has focused on phasing out HFCs, the third generation of fluorinated gases, which have been commercialized as alternatives to ODS. EIA has been heavily engaged in the EPA's Significant New Alternatives Policy (SNAP) program's rulemaking process in addition to working domestically to encourage transitions to available low-GWP HFC-free alternatives in the U.S. We have also been working with the United States and the international community to implement an HFC phase-down under the Montreal Protocol.

The proposed rulemaking is a step in the right direction to implementing the President's CAP, which directs agencies to, "Purchase cleaner alternatives to HFCs whenever feasible and transition over time to equipment that uses safer and more sustainable alternatives."¹ Government procurement and transition to

¹ Executive Office of the President. *The President's Climate Action Plan*. 6/25/13. [Web](#).

low-GWP HFC-free alternatives will lead to significant greenhouse gas (GHG) reductions by the federal government and promote market development and uptake of systems using available low-GWP HFC-free refrigerants and blowing agents (See EIA's June 2015 attached report, *An Initial Guide to HFC-free Procurement and Refrigerant Management for the U.S. Government*, offering more detailed information in support of these comments).² EIA urges the U.S. government to amend the rule such that it would clearly prioritize procurement of the lowest-global warming potential (GWP) alternative currently available on the market.

Domestic Actions and International Momentum on Phasing-Down HFCs

The proposed rulemaking will help federal agencies and departments meet several Executive Actions and Orders pertaining to HFCs and additionally will support the U.S. Department of State's efforts in achieving an amendment to the Montreal Protocol to phase down HFCs. HFC emissions are a growing concern due to their significant impacts on the climate. HFCs do not deplete the ozone, however they are powerful GHGs with global warming potentials (GWP) hundreds to thousands of times more damaging to the climate than carbon dioxide (CO₂).³ In the U.S., HFC emissions have increased by 310 percent since 1990 and are expected to triple again by 2030.⁴ The proposed rulemaking can act to significantly drive federal government procurement of low-GWP HFC-free climate-friendly and more energy efficient alternatives, which would lead to considerable reductions in HFC emissions in the U.S., and also serve to stimulate development of the U.S. market for low-GWP systems.

Executive Orders and EPA SNAP Listings

In addition to directives in the President's CAP focused on transitioning away from HFCs, President Obama has specifically outlined the need and importance of federal procurement of low-GWP alternatives in several subsequent Executive Actions and Orders. In September 2014, President Obama reinforced his statements in the CAP by taking several executive actions targeting government procurement of low-GWP alternatives and partnering with private sector companies that pledged new commitments to decrease emissions of HFCs in the U.S.⁵ Additionally, President Obama's most recent executive order in March 2015, *Executive Order 13693 - Planning for Federal Sustainability in the Next Decade*⁶, will play a pivotal role in providing agencies with the guidance needed to begin procuring climate-friendly, energy efficient, HFC-free equipment and products.

As the President increases pressure to phase down HFCs, the Environmental Protection Agency (EPA) has begun to use its authority under the Clean Air Act (CAA) through its Significant New Alternatives Policy

² EIA, *An Initial Guide to HFC-free Procurement and Refrigerant Management for the U.S. Government*, 6/10/15. [Web.](#)

³ UNEP Working Group I. 2.10.2 *Direct Global Warming Potentials - IPCC Fourth Assessment Report: Climate Change*. United Nations Environment Program, 2007. [Web.](#) 8/25/15.

⁴ EPA. EPA's Significant New Alternatives Policy (SNAP) Program and Hydrofluorocarbons. DOE FEWG/CAWG Web Teleconference. 11/14/13. [Web.](#) 6/5/15.

⁵ Executive Office of the President Council on Environmental Quality. Fact Sheet: Obama Administration Partners with Private Sector on New Commitments to Slash Emissions of Potent Greenhouse Gases and Catalyze Global HFC Phase-down. Press Release. 9/16/14. [Web.](#) 6/5/14.

⁶ The White House. Executive Order – Planning for Federal Sustainability in the Next Decade. 3/19/15. [Web.](#)

(SNAP) program⁷ to encourage transitions to lower-GWP alternatives. The EPA has finalized several rulemakings focused on listing climate-friendly, energy efficient alternatives as acceptable for use in various end-uses, while simultaneously finalizing a rulemaking that will delist several high-GWP HFCs from acceptable use in several end-uses. The EPA's SNAP program aims to drive commercial development toward substitutes that present a lower overall risk to human health and the environment, and to change the certification of alternatives when new alternatives enter the market that pose less harm to human health and/or the environment. As the U.S. continues efforts internationally to phase down HFCs under the Montreal Protocol, the EPA's SNAP program will continue to play a critical role in encouraging a quick U.S. transition to low-GWP alternatives through new rulemaking/s that prohibit the use of certain HFCs. The actions taken by the President and the EPA indicate that the U.S. market is beginning to shift to low-GWP, climate-friendly, energy efficient alternatives and accelerated federal procurement of these alternatives will play a critical role in hastening market development.

International Momentum Building to Phase-Down HFCs Globally

Significant progress is building towards an agreement to phase down HFCs using the framework of the Montreal Protocol. North American countries (U.S., Canada, and Mexico), the Federated States of Micronesia and other Island States, and the European Union have long been strong proponents of such an amendment to the Montreal Protocol. Recently India submitted an amendment proposal and the Group of African Countries also signaled support for such a phase down.⁸ Furthermore, China and Brazil have signaled their readiness to phase-down HFCs under the Montreal Protocol in recent announcements.⁹ As progress internationally continues to build, U.S. leadership through federal procurement of low-GWP HFC-free systems is an imperative so that the U.S. can demonstrate that a phase-down of HFCs is feasible and show that the U.S. is leading the way.

The Developing Market for Climate-Friendly Alternatives

As companies respond to government's taking actions to decrease emissions of HFCs, increasingly climate-friendly alternatives are becoming available on the market. Already climate-friendly alternatives exist for nearly every sector and end-use¹⁰, with around 420 companies providing systems in Europe¹¹ and significant growth occurring in the United States and Canada.¹² Systems using climate-friendly alternatives provide lasting, energy efficient solutions and giving preference to procuring available technologies using climate-friendly alternatives will lead to significant GHG reductions, promote sustainable development, and further support the growing market for climate-friendly technologies.

Federal Leadership in Transitioning to Low-GWP, Climate-Friendly, Energy Efficient Technology

⁷ EPA, Significant New Alternatives Policy (SNAP) Program, [Web](#). 6/5/15.

⁸ EIA, *African Group Spurs Progress Towards Global Agreement on HFCs*, [Web](#). 4/24/15.

⁹ EIA, *China and Brazil Announcements This Week Help Set the Stage for Progress at Montreal Protocol*. [Web](#). 7/2/15.

¹⁰ Refer to <http://cooltechnologies.org/> and EIA's *Putting the Freeze on HFCs* report.

¹¹ Shecco, *GUIDE 2014: Natural Refrigerants - Continued Growth & Innovation in Europe*, [Web](#). 1/13/14.

¹² Shecco, *Guide to Natural Refrigerants in North America – State of the Industry 2015*, [Web](#). 8/31/15.

Equipment using climate-friendly refrigerants has been found to be significantly more energy efficient in many end-uses when compared to traditional HFC-based systems.¹³ These systems are already commercially available in a majority of end-uses (See attached report, *An Initial Guide to HFC-free Procurement and Refrigerant Management for the U.S. Government*), with significant development and new technologies being proven on a rapid basis for the remaining end-uses. Transitioning to these new technologies provides a significant opportunity for the federal government to mitigate HFC emissions while simultaneously leading to reduced energy costs.

Not only will procurement of energy efficient, HFC-free cooling equipment lead to reductions in government-wide energy costs, federal leadership on energy efficiency will raise public awareness about the broad environmental and economic benefits of these products, leading to increased development by manufacturers, wider market adoption and acceptance by consumers in the U.S., and significant GHG reductions throughout the United States.¹⁴ Government purchasing power can greatly support piloting, developing, and scaling-up markets for these climate-friendly, energy efficient, HFC-free technologies and this proposed rulemaking can act to provide the regulatory authority necessary to increase and accelerate U.S. federal leadership in transitioning to these next generation climate-friendly technologies.

Mid-Range GWP HFCs and HFO/HFC Blends: Bad for the Climate and the Economy

There is a major move by the fluorinated gas industry to push mid-range GWP HFCs and HFO/HFC blends with GWPs from 300 to 1500 onto the market. This push is setting up a circumstance where a fourth phase-out of fluorinated gases will be necessary to remove these “mid-range GWP” alternatives from the market in just a few years due to their devastating impact on the climate. Widespread adoption of mid-range HFCs and HFO/HFC blends could cut in half the 100 GtCO_{2e} mitigation expected from the HFC phase-down. Some of the blends that are being proposed have GWPs higher than the “high GWP” refrigerants that the EPA, under its recent rulemaking, has just prohibited from use in new equipment. By slowing the transition to truly low-GWP climate-friendly alternatives, mid-range GWP HFCs and HFO/HFC blends will not only greatly impact the climate, but also dramatically increase the cost of and delay the transition of refrigeration, air conditioning and other sectors that use HFCs to truly low-GWP alternatives. The U.S. FAR should make clear that the U.S. government is not going to be part of yet another partial transition, which will make getting rid of HFCs last significantly longer than the currently predicted 2030-2040.

The U.S. government should not procure any mid-range GWP alternatives where truly low-GWP alternatives have been proven and commercialized. The U.S. government should not purchase any new equipment or product with a refrigerant that has a GWP higher than 150. For retrofits, higher GWP refrigerants can be purchased if they have GWPs at least 50% less than the current refrigerant that will be replaced. If those substitutes are used for retrofits, they must be coupled with state of the art leak detection and maintenance, bringing the overall leak rate to at minimum below 10%. If old systems cannot achieve this, they should be decommissioned and replaced with new equipment using a refrigerant with a GWP of less than 150. This is necessary because leaky refrigeration systems can release up to 25% of their refrigerant charge annually and they also use substantially more energy when the charge has been partially dissipated. The transition to truly low-GWP climate-friendly alternatives is possible now and a strong rulemaking will show that the U.S. government is committed to phasing down HFCs.

¹³ Witt, Monika. Eurammon. Natural Refrigerants: Current Developments and Trends. Web. 6/5/15; Linde Gas. Natural Refrigerants. 2015. [Web](#). 6/5/15. Natural Refrigerants. Home Page. [Web](#). 6/5/15; Carrier. *Natural Refrigerants Make Commercial Sense*, Carrier Study Says. 9/8/14. [Web](#). 6/5/15.

¹⁴ EPA. Energy efficient Product Procurement. 2011. [Web](#). 6/5/15.

EIA's Recommendations

EIA's suggested recommendations are underlined and italicized or crossed out below:

Part 2 - Definition of Words and Terms: 2.101 Definitions.

- Climate-Friendly Alternative means an alternative that is listed as acceptable under the EPA's Significant New Alternatives Policy (SNAP) program (40 CFR part 82 Subpart G) that has a GWP of less than 150.
- Lowest-GWP Alternative means an alternative that is identified as acceptable under the EPA's SNAP program and has the lowest-global warming potential compared to all other acceptable alternatives for the relevant end-use and has a GWP under 150 for new equipment and a GWP at least 50% lower than the current refrigerant for retrofits.
- Reclaim Refrigerant means reprocessed refrigerant to at least the purity specified in appendix A to 40 CFR part 82, subpart F (based on ARI Standard 700-1993, Specifications for Fluorocarbon and Other Refrigerants) and verify this purity using the analytical methodology prescribed in appendix A. In general, reclamation involves the use of processes of procedures available only at a reprocessing or manufacturing facility.
- Virgin Refrigerant means a refrigerant produced for its first use in new and retrofit equipment and systems.

Part 7 – Acquisition Planning

- 7.103 Agency-head Responsibilities
 - o (p)(2) Comply with the policy in 11.002(d) regarding procurement of: bio-based products, products containing recovered materials, environmentally preferable products and services (including Electronic Product Environmental Assessment Tool (EPEAT®-registered electronic products, nontoxic or low-toxic alternatives), ENERGY STAR® and Federal Energy Management Program-designated products, renewable energy, water-efficient products, non-ozone depleting products, climate-friendly alternative products, and products and services (including recharging systems with reclaimed refrigerant) that minimize or eliminate, when feasible, the use, release, or emissions of high global warming potential hydrofluorocarbons;

Part 11 – Describing Agency Needs

- 11.002 Policy
 - o (d)(1)(vi) Non-ozone depleting substances; climate-friendly alternatives; and products and services (including recharging systems with reclaimed refrigerant) that minimize or eliminate, when feasible, the use, release or emission of high global warming potential hydrofluorocarbons.

Part 23 – Application of Labor Laws to Government

- 23.000 Scope
 - o (d) Acquiring energy-efficient and water-efficient products and services, environmentally preferable (EPEAT®-registered electronic products, nontoxic or low-toxic alternatives) products, products containing recovered materials, biobased products, non-ozone depleting products, climate-friendly alternatives, and products and services (including recharging systems with reclaimed refrigerant) that minimize or eliminate, when feasible, the use, release or emission of high global warming potential hydrofluorocarbons.
- Subpart 23.8 – Ozone-Depleting Substances and Hydrofluorocarbons
 - o 23.802 Policy
 - (c) Maximize the procurement of, where feasible, reclaimed refrigerant and acceptable climate-friendly alternatives or lowest-GWP alternatives. If refrigerants with a GWP greater than 150 are used for retrofits, the agency must employ state of the art leak detection and maintenance, and maintain leakage of the refrigerant below 10% per annum. If this is not achievable, the agency must replace the system with a new system using a refrigerant with a GWP less than 150.
 - o 23.803 Procedures
 - (c) Specify, when feasible, that contractors shall maximize the use of reclaimed refrigerant and substitute acceptable climate-friendly alternatives or the lowest-global warming potential alternatives, for high global warming potential hydrofluorocarbons in products and services; and
 - o 23.804 Contract Clauses
 - Except for contracts that will be performed outside the United States and its outlying areas, *if proven to be unfeasible*, insert the following clauses:

Part 25 – Foreign Acquisition

- Comment:
 - o The proposed rulemaking should outline and clarify that if products using climate-friendly alternatives are available in other markets but not available or not available at commercial levels in the U.S. (i.e. Europe) and are identified as acceptable under the EPA’s SNAP program, then the product may be acquired under the nonavailability exception (25.103).

Part 52 – Solicitation Provisions and Contract Clauses

- 52.223-11 Ozone-Depleting Substances and High Global Warming Potential Hydrofluorocarbons
 - o Comment: EIA believes in addition to requiring contractors to label products that contain or are manufactured with ozone-depleting substances, contractors should also be required to label products which contain or are manufactured with hydrofluorocarbons.
 - The warning label for products containing or manufactured using hydrofluorocarbons can be as follows:
 - Contains (or manufactured with, if applicable) * _____, a substance(s) which harm(s) public health and environment by disproportionately contributing to the destabilization of the Earth’s climate.

- 52.223-12 Maintenance, Service, Repair, or Disposal of Refrigeration Equipment and Air Conditioners
 - o (c)(1) Transitioning at the earliest feasible time from high global warming potential hydrofluorocarbons to acceptable alternatives, giving preference to, where feasible, climate-friendly alternatives or lowest-GWP alternatives and maximizing the use of reclaimed refrigerant.
 - o (d)(i) Normally each system contain 25 or more pounds of hydrofluorocarbons or refrigerant blends containing hydrofluorocarbons (a building containing multiple systems that each individually contain less than 25 pounds of hydrofluorocarbons or refrigerant blends containing hydrofluorocarbons should be assessed as the entire building's refrigerant use and not on an individual system level); and

- 52.223-XX Aerosols
 - o (b) Unless otherwise specified in the contract, the Contractor shall reduce its use, release, or emissions of high global warming potential hydrofluorocarbons from aerosol propellants or solvents under this contract, by furnishing products and equipment or performing services using acceptable climate-friendly alternatives or lowest-GWP alternatives, when feasible.

- 52.223-YY Foams
 - o (b) Unless otherwise specified in the contract, the Contractor shall reduce its use, release, or emissions of high global warming potential hydrofluorocarbons from aerosol propellants or solvents under this contract, by furnishing products and equipment or performing services using acceptable climate-friendly alternatives or lowest-GWP alternatives, when feasible.

Conclusion

EIA supports DOD, GSA, and NASA's proposed rulemaking, however we encourage the proposal to specify the preference for climate-friendly and lowest-GWP alternatives. Federal procurement of climate-friendly alternatives will produce significant benefits for the U.S. government, U.S. consumers, and the global climate. Additionally, enacting a strong rulemaking that seeks to maximize procurement of climate-friendly alternatives with a GWP less than 150 will show the necessary federal leadership on climate in the U.S. and internationally. If the U.S. does so now, then as the international community continues its momentum towards achieving an agreement to phase down HFCs under the Montreal Protocol, which has been supported and jointly-led by the U.S. State Department and the U.S. EPA on behalf of the U.S. government, the United States will not be forced to again transition its refrigeration and air-conditioning systems once an international agreement is reached. Furthermore, it is evident that phasing down HFCs is a priority for President Obama and his administration, therefore this rulemaking should seek to maximize the procurement of low-GWP, climate-friendly, energy efficient products by specifying preference for products with a GWP less than 150 in the rulemaking where applicable.

Thank you again for the opportunity to comment on this timely and important rulemaking. We look forward to continuing the discussion with the DOD, GSA, and NASA as the rulemaking is further developed and we are available at any time to discuss our comments. Please do not hesitate to contact us with any questions, comments, or if you need additional feedback.

Respectfully submitted,

The Environmental Investigation Agency

A handwritten signature in cursive script, appearing to read "Lisa Handy".

Lisa Handy

Senior Policy Advisor

Lisahandy@eia-global.org

202-483-6621

A handwritten signature in cursive script, appearing to read "Lowell Chandler".

Lowell J. Chandler

Climate Policy & Research Associate

Lchandler@eia-global.org