



The Alliance
for Responsible Atmospheric Policy

January 17, 2017

Ms. Pamela Gupta, Manager
Greenhouse Gas Reduction Strategy Section
Research Division
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: Comments on Revised Proposed SLCP Reduction Strategy

Dear Ms. Gupta,

The Alliance for Responsible Atmospheric Policy (Alliance) is an industry coalition organized in 1980 to address the issue of stratospheric ozone depletion. It is the leading voice of manufacturers, businesses and trade associations who make or use fluorinated gases for the global market. Today, Alliance member companies are leading the development of safe, efficient, next-generation technologies and applications with little or no impact on the climate or ozone layer. According to a recent study, the US fluorocarbon using and producing industries contribute more than \$158 billion annually in goods and services to the US economy, and provide employment to more than 700,000 individuals with an industry-wide payroll of more than \$32 billion. The Alliance represents companies across several sectors engaged in the development of economically- and environmentally-beneficial international and domestic policies regarding fluorinated gases. A list of members is attached.

The Alliance is proud of its extensive history of working in a constructive manner with the Air Resources Board (ARB), the US government and international bodies on the protection of stratospheric ozone and the mitigation of climate change. The Alliance appreciates ARB's ongoing dialog with stakeholders on the HFC components in the proposed Short-Lived Climate Pollutant (SLCP) Reduction Strategy and is pleased to provide these additional considerations.

A Global Approach

The Alliance is generally supportive of efforts to reduce the climate impact of HFCs. ARB and the Alliance agree that the most effective means of reducing the future climate change contribution of HFCs should be global in nature. The Alliance appreciates that ARB waited for the 2016 Montreal Protocol negotiations of a global HFC phase-down to be completed. The Kigali Amendment now provides great potential to achieve significant world-wide HFC reductions

It is understood that ARB is currently assessing the expected impact of the Kigali Amendment in terms of HFC emissions reductions. If the results of this assessment will have an impact on the HFC policies pursued by the State of California, the Alliance encourages ARB to go beyond a peer-review of the assessment and initiate a formal opportunity for stakeholders to provide more review and comment on the study.

Energy Efficiency

The Alliance continues to encourage ARB to ensure that its strategy balances a focus on direct greenhouse gas emissions from refrigerants with the fact that the vast majority, possibly as much as 95 percent, of emissions related to HVAC is from the energy necessary to operate the equipment.

Data from Alliance members suggest that carbon dioxide emissions from electricity generation in California are approximately 70 percent of that of the US as a whole per unit of electricity generated. For most applications though, the direct emissions from electricity use still far outweigh the direct emissions from refrigerants, even in California. Even by greatly increasing the generation from renewables, the indirect emissions will likely remain the predominant source of carbon dioxide emissions from many HVAC applications.

Codes and Standards

The Alliance appreciates ARB's ongoing interest in supporting the research cooperation by the US Department of Energy, ASHRAE and AHRI. The findings from this research will inform and advance the efforts of relevant standard-setting bodies as they develop guidelines for the safe use of alternatives to high global warming potential (GWP) HFCs. As ARB is aware, these processes are both lengthy and complex in nature and will be fundamental in providing the framework for the successful implementation of any HFC policies.

It is critical that the codes and standards modifications necessary for low-GWP HFC substitutes be taken into account as part of technology strategies.

Refrigerant Management

In November 2016, the US EPA finalized its rule to extend provisions of Section 608 of the Clean Air Act to HFCs, in line with the Alliance's 2015 petition requesting the same. The Alliance encourages ARB to consider what potential reductions in HFC emissions in California may be achievable from the implementation of this rule and to identify any complementary actions ARB may pursue to promote proper refrigerant management.

Additional refrigerant management measures, such as promoting the use of reclaimed material and the acceptance of HFC reclaim credits should be studied and considered. Properly incentivizing HFC reclaim credits will stimulate a robust and active reclaim market, allowing material to hold market value and thus flow to the most critical required applications.

ARB should ensure that any HFC measures included in the final strategy avoid increasing emissions as a result of the accelerated decommission of equipment and the potential unwanted release of materials into the atmosphere.

Conclusion

As a final suggestion, the Alliance reiterates that any policy measure should be assessed based on the following factors:

- Technical feasibility,
- Ease of implementation,
- Ease of enforcement, and
- Anticipated
 - Environmental Impacts, and
 - Economic Impacts on Consumers, Small businesses (including contractors, distributors, and retailers), and Industry

While the Alliance supports concerted global action to avoid significant future growth in the greenhouse gas emissions associated with the use of HFCs in their various applications and to encourage implementation of low-GWP substitute compounds and technologies, it is important that those emissions are avoided in a manner that ensures industry is able to continue to deliver critical societal and lifecycle climate benefits provided by their products. ARB's actions to control HFCs should be carefully pursued and incorporate the important considerations we have cited above. With the incoming presidential administration in the US, however, there is uncertainty about the direction in which the federal government will move with regards to addressing HFCs. The Alliance encourages ARB to monitor the developments at the international and US federal levels and to ensure that any actions by ARB promote a balance and continuity between these levels of policy.

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The Alliance remains available to assist ARB staff as it moves towards a final strategy and looks forward to working together in a constructive manner to achieve and implement an environmentally-beneficial, safety-enhancing, and economically-viable strategy.

Thank you.

Sincerely,

A handwritten signature in black ink, appearing to be 'KF' with a stylized flourish.

Kevin Fay
Executive Director
Alliance for Responsible Atmospheric Policy

cc:

Bart Croes, ARB

Glenn Gallagher, ARB



The Alliance

for Responsible Atmospheric Policy

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