

October 30, 2015

Mr. Richard Corey, Executive Officer California Air Resources Board 1001 I Street Sacramento, CA 95814

Re: Alliance Comments on Draft Short-Lived Climate Pollutant (SLCP) Reduction Strategy

Dear Mr. Corey,

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, climate- and ozone-friendly technologies and applications. 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. Having submitted comments in response to ARB's SLCP Reduction Strategy concept paper before and after meeting directly with ARB staff to exchange views on the reduction strategy, the Alliance is pleased to provide these considerations with regards to the draft strategy.

The Alliance commends ARB staff on its commitment to an effective process of stakeholder consultation. The Alliance appreciates the sincere engagement and information exchange with industry which has taken place, consistent with the provisions of SB 605.

The Alliance is generally supportive of efforts to reduce high-global warming potential (GWP) HFCs. ARB's efforts, however, should also be considered in the context of their contribution to an effective global approach. The Alliance encourages ARB to ensure that its strategy chosen 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.

The Alliance welcomes the agreement it shares with ARB that the most effective means of reducing the future climate change contribution of HFCs should be global in nature. It also must do so in a manner that is orderly, and in a flexible fashion which allows companies to continue to fulfill consumers' need for products and technologies which are vital to public health, food safety, energy conservation, comfort and productivity. The Alliance agrees with ARB that national and international agreements provide the best way to reduce the supply of and emissions from the use of refrigerants with high GWPs. The US EPA has signaled its intent to take additional steps to address the use of HFCs, and a uniform federal standard is more desirable than a state-by-state effort. On that note, the Alliance encourages ARB to carefully consider whether to encourage local and regional regulation of HFCs as seen in the draft strategy. The benefit of a global solution is that it avoids a broad patchwork of sub-global policies, which could lead to inconsistent requirements between regions and added costs of compliance being passed to consumers.

The Alliance recognizes, however, that there is uncertainty over whether the Montreal Protocol will be amended to phase-down HFCs and, as a result, sub-global jurisdictions have begun to address HFCs in order to reduce emissions of high-GWP HFCs. The Alliance appreciates ARB's decision to allow international negotiations under the Montreal Protocol to play out this Fall before determining precisely how California can take actions to support and complement global efforts. The Alliance remains available to provide updates on the state of negotiations under the Protocol as helpful.

The Alliance notes ARB's interest in pursuing additional reductions beyond those which may be achieved under the Montreal Protocol. It is important that any such measures carefully and fully consider relevant environmental and economic impacts, including the challenge faced by a number of sectors in adopting lower-GWP alternatives.

The Alliance appreciates ARB's willingness to incorporate a potential phase-down in California's supply of HFCs which aligns with similar efforts in Australia, Canada, Europe and Japan. The Alliance remains available to serve as an informational resource in the design of such potential structures.

As indicated in the draft strategy, important progress on SLCPs has been made in the Climate and Clean Air Coalition (CCAC). Public and private sector coalition partners, including the Alliance, have developed innovative ways to address this element of the climate change challenge.

In line with ARB's emphasis on developing early voluntary actions to achieve earlier reductions, the Alliance is proud to have been central to the launch of two CCAC initiatives: the Global Food Cold Chain Council and the Global Refrigerant Management Initiative. These industry-led

initiatives will reduce the unintended climate change contribution of HFCs in the food cold chain and servicing sector consistent with the goals of the HFC amendment to the Montreal Protocol.

The Alliance appreciates ARB's recognition of the significant private sector commitments to reduce the climate change impact of HFCs which were made at the White House in September 2014. Many Alliance member companies participated in that important event and the Alliance is pleased to note that a follow-up event was convened by the White House earlier this month. At that event, Alliance member companies announced significant progress towards their 2014 commitments as well as new actions, including plans by the Alliance and other industry partners to develop a Reclaimed HFC Credit Bank.

Refrigerant management, including reclamation, will likely receive a great boost given that the US EPA, at the same White House event this month, announced that it issued a proposed rule as a response to the Alliance's January 2014 petition requesting that the provisions of Sec. 608 of the Clean Air Act be extended to HFCs. It remains the most viable strategy for near term emissions reductions. California must do more to minimize service and disposal emissions and enhance reclaim or reclaimed refrigerants.

The Alliance believes the reclamation of refrigerants can be a useful tool to reduce emissions while providing a source for the continued servicing of installed equipment. To that end, the Alliance appreciates that ARB's proposal to "prohibit the sale or distribution of refrigerants with very-high GWP values" may include an exemption for refrigerants certified to be reclaimed or recycled. This is a reasonable exemption that minimizes environmental costs while potentially creating economic value.

On incentive programs, the Alliance reiterates that the specific mechanism and cost implications must be carefully considered as well as the impact on energy efficiency of low GWP alternatives that might be incentivized. The Alliance encourages ARB to explore incentives for using low-GWP refrigerants which benefit all sectors in lieu of fees based on usage of certain refrigerants.

On potential bans on the use of high-GWP refrigerants, the Alliance reiterates that companies will comment individually on the feasibility of sector-based controls since diverse views exist among Alliance members regarding such measures. Again, the Alliance believes that if ARB moves forward with sector controls, those controls must incorporate the necessary flexibility to enable compliance, avoid the imposition of significant implementation costs and allow consumers to transition to alternative technologies with net-equal or improved energy efficiency. On that note, the Alliance appreciates that ARB notes the connection between energy efficiency and refrigerant choice in appliances and HVACR systems. It is also important to recognize that manufacturers will need alternatives available which allow them to meet increasingly stringent energy efficiency standards.

For any potential HFC controls, the Alliance encourages the Board to take into account the timelines necessary for changes to any relevant codes and standards, including the model building, fire, mechanical and residential codes used in California after adoption. This important

factor has often been a secondary concern for policymakers attempting to address HFCs, but is key to implementing a successful transition from high-GWP HFCs. Technology reviews must look both at the state of technology as well as what is allowed under the above mentioned codes for commercial and residential properties.

The Alliance would like to emphasize its concern regarding the use of both 20-year and 100-year GWPs in the draft strategy. Although ARB states in the draft strategy that 20-year GWPs "better [capture] the importance of the SCLPs and give a better perspective on the speed at which SLCP emission controls will impact the atmosphere relative to CO2 emission controls," the Alliance notes that consistency in this respect can promote common understanding and consensus-building with affected stakeholders. From a comparative perspective, the 100 year time horizon has been successfully relied upon in both the Montreal Protocol and UN Framework Convention on Climate Change for consistency of decision-making and should continue to be utilized.

As far as suggestions for future information gathering, the Alliance continues to encourage ARB to develop graphic projections which explain the concern that an amendment alone would be insufficient to address emissions from the installed base. Additionally, the Alliance continues to encourage ARB to graphically communicate what emissions reductions can be achieved with each sector proposed for the draft strategy.

Although ARB seeks to harmonize its HFC phase-down with the North American amendment (NAA) proposal in the Montreal Protocol, ARB's phase-down is emissions-based and the proposed NAA is consumption based. The Alliance continues to encourage ARB to resolve this disparity and communicate how ARB has done so.

The Alliance very much looks forward to ARB's proposed strategy and draft Environmental Analysis and continuing to be a resource for ARB staff as it advances these important policies. 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
 - o 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, 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.

The Alliance remains available to assist ARB staff as it develops its proposed strategy. The Alliance appreciates the opportunity to provide input on ARB's draft strategy and looks forward to working with the agency in a constructive manner to achieve and implement an environmentally beneficial, safety enhancing, and economically viable strategy.

Sincerely,

Kevin Fay

Executive Director

Alliance for Responsible Atmospheric Policy



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