

## FACT SHEET

### Proposed Rule - Protection of Stratospheric Ozone: Change of Listing Status for Certain Substitutes under the Significant New Alternatives Policy Program

#### ACTION

Under this proposed rule, various hydrofluorocarbons (HFCs) and HFC-containing blends that were previously listed as acceptable alternatives to ozone-depleting substances (ODS) will be listed as unacceptable for some uses. This proposed rule is part of the Significant New Alternatives Policy (SNAP) program, under which the EPA continuously reviews alternatives to ODS to find substitutes that pose less overall risk to human health and the environment. As safer alternatives become available for particular applications, the list of acceptable substitutes is evaluated and revised.

The following are the proposed changes in listing status:

- 1) For ***aerosol propellants***, as of January 1, 2016
  - HFC-125 as unacceptable;
  - HFC-134a as acceptable, subject to use conditions, allowing its use only in specific types of technical and medical aerosols (e.g. metered dose inhalers) (and prohibiting its use in consumer aerosols); and
  - HFC-227ea as acceptable, subject to use conditions, allowing its use only in metered dose inhalers.
- 2) For ***motor vehicle air conditioning systems*** in newly manufactured, light-duty vehicles
  - HFC-134a as unacceptable starting with model year (MY) 2021; and
  - The refrigerant blends SP34E, R-426A (also known as RS-24), R-416A (also known as HCFC Blend Beta or FRIGC FR12), R-406A, R-414A (also known as HCFC Blend Xi or GHG-X4), R-414B (also known as HCFC Blend Omicron), HCFC Blend Delta (also known as Free Zone), Freeze 12, GHG-X5, and HCFC Blend Lambda (also known as GHG-HP) as unacceptable starting with MY 2017.
- 3) For ***new and retrofit retail food refrigeration (including stand-alone equipment, condensing units, direct supermarket systems, and indirect supermarket systems) and for new and retrofit vending machines***, as of January 1, 2016
  - The HFC blends R-507A and R-404A as unacceptable.
- 4) For ***new and retrofit retail food refrigeration (including direct supermarket systems and indirect supermarket systems)***, as of January 1, 2016
  - HFC-227ea, R-407B, R-421B, R-422A, R-422C, R-422D, R-428A, and R-434A as unacceptable.
- 5) For ***new, stand-alone retail food refrigeration and new vending machines***, as of January 1, 2016
  - HFC-134a and certain other HFC refrigerant blends as unacceptable.
- 6) For ***foam blowing agents***, as of January 1, 2017, except where allowed under a narrowed use limit
  - HFC-134a and blends thereof as unacceptable in all foam blowing end-uses;

- HFC-143a, HFC-245fa and HFC-365mfc and blends thereof, and the HFC blends Formacel B, and Formacel Z-6 as unacceptable in all foam blowing end-uses where they are currently listed as acceptable, except for spray foam applications; and
- The HFC blend Formacel TI as unacceptable in all foam blowing end-uses where it is currently listed as acceptable.

This rule also proposes to list as unacceptable certain hydrochlorofluorocarbons (HCFCs) being phased out under the Montreal Protocol where substitutes are available that pose overall lower risk to human health and/or the environment.

## **BACKGROUND**

- This proposal responds to the President's Climate Action Plan by prohibiting certain uses of high global warming potential (high-GWP) HFCs where alternatives are available that are safer for human health and the environment.
- The emissions reductions from this proposed rule are estimated to be 31 to 42 million metric tons of carbon dioxide equivalent (MMTCO<sub>2</sub>eq) in 2020.
- Under the Significant New Alternatives Policy (SNAP) program (Section 612 of the Clean Air Act), EPA continuously reviews alternatives to ozone-depleting substances (ODS) to find substitutes that pose less overall risk to human health and the environment and issues updates to the lists of acceptable and unacceptable substitutes.
- Section 612 mandates EPA to prohibit the use of a substitute that may present risk to human health or the environment where a lower risk alternative is available or potentially available and provides EPA with the authority to change the listing status of a particular substitute if such a change is justified by new information or changed circumstance.
- Over the past year and increasingly since the Climate Action Plan's announcement in June 2013, EPA has engaged with potentially affected stakeholders and received valuable input through conducting seven sector-focused workshops and two broad SNAP stakeholder meetings.
- In its determination to change the status of a number of substitutes that were previously listed as acceptable, SNAP's evaluation considered all the risk factors reviewed by SNAP including ozone depletion potential as well as flammability, toxicity, occupational health and safety, and contributions to climate change and other environmental factors.
- Based on this evaluation and information showing that other substitutes are available for the same uses that pose lower risk overall to human health and/or the environment, this action proposes to modify the listings for certain high-GWP HFCs in various end-uses in the aerosols, refrigeration and air conditioning, and foam blowing sectors.
- This action also proposes to modify the listings for certain HCFCs from acceptable to

unacceptable where substitutes are available that pose overall lower risk to human health and/or the environment; the HCFCs are listed for use in the aerosols, foam blowing agents, fire suppression and explosion protection agents, sterilants, and adhesives, coatings and inks sectors.

- HCFCs are being phased out of production under the Montreal Protocol and the Clean Air Act, where regulations issued under other sections (605 and 610) already restrict their use in many applications. Changes to the status of HCFCs in this action are consistent with the goals of the Montreal Protocol.