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## FACT SHEET

# Proposed Rule 25 – Protection of Stratospheric Ozone: Listing of Substitutes under the Significant New Alternatives Policy Program in the Refrigeration & Air Conditioning and Fire Suppression Sectors

## Significant New Alternatives Policy (SNAP) Program

Under section 612 of the Clean Air Act (CAA), EPA reviews substitutes in a comparative risk framework. EPA lists these substitutes as acceptable, acceptable subject to use conditions, acceptable subject to narrowed use limits, or unacceptable (prohibited) for specific uses. Section 612 requires EPA to list as acceptable those substitutes that do not present a significantly greater risk to human health and the environment as compared with other substitutes that are currently or potentially available.

As part of the evaluation of overall risk to human health and the environment, EPA considers many criteria, including the flammability and toxicity of a substitute, worker and consumer exposure, and environmental risks such as impacts on ecosystems, local air quality, and on the global atmosphere.

## Today's Action

Under this proposed rule, a number of substances would be listed as acceptable, subject to use conditions, or acceptable, subject to narrowed use limits, in the refrigeration and air conditioning sector and the fire suppression sector. Consistent with CAA section 612 as it has historically been interpreted under the SNAP program, EPA is proposing to issue these listings and modifications based on evaluation of the substitutes addressed in this action using the SNAP criteria for review and considering other available and potentially available substitutes.

This action also proposes to modify a use condition listing for the refrigeration and air conditioning sector. EPA previously found the refrigerant HFC-32 acceptable, subject to use conditions, in new self-contained room air conditioners and heat pumps in SNAP Rule 19 (80 FR 19461; April 10, 2015). This proposed action would modify those use conditions to be consistent with use conditions applied to other refrigerants with

### Proposed Rule

#### *What is proposed in the Rule?*

- Lists several substitutes as acceptable subject to use conditions or acceptable subject to narrowed use limits
- Modifies use conditions for one refrigerant
- References latest versions of UL 60335-2-40, UL 61010-2-011, and ASHRAE 15-2019

#### *Which industrial sectors are included?*

- Refrigeration & Air Conditioning
- Fire Suppression & Explosion Protection

#### *Who would be affected?*

- Chemical Producers
- Equipment manufacturers
- Commercial and consumer end users of equipment and products using refrigerants and fire suppressants
- Service technicians

#### *When are public comments due?*

Must be received by 45 days after publication in the *Federal Register*

lower flammability as finalized in SNAP Rule 23 (86 FR 24444; May 6, 2021). The use conditions, which address safe use of flammable refrigerants, would be revised to reflect the UL Standard 60335-2-40, 3<sup>rd</sup> Edition, in place of UL Standard 484 and would apply to equipment manufactured after the effective date of a final rule based on this proposal.

Additionally, EPA is requesting advance comment on assessing ozone depletion risks of very short-lived substances with ozone-depletion potentials similar to ozone-depleting substances scheduled to be phased out.

## Summary of Proposed Rule

### ACCEPTABLE ALTERNATIVES, WITH USE CONDITIONS

End-Use	Substitutes	Conditions
<b>Refrigeration &amp; Air Conditioning</b>		
Centrifugal Chillers (New) for comfort cooling	HFO-1234yf, R-454A, R-454B, R-454C	Acceptable Subject to Use Conditions*
Positive Displacement Chillers (New) for comfort cooling	HFO-1234yf, R-454A, R-454B, R-454C	Acceptable Subject to Use Conditions*
Positive Displacement Chillers (New) for comfort cooling using a rotary or scroll compressor	HFC-32, R-452B	Acceptable Subject to Use Conditions*
Industrial Process Air Conditioning (New) using a chiller	HFO-1234yf, R-454A, R-454B, R-454C	Acceptable Subject to Use Conditions*
Industrial Process Air Conditioning (New) using a chiller with a rotary or scroll compressor	HFC-32, R-452B	Acceptable Subject to Use Conditions*
Residential Dehumidifiers (New)	HFO-1234yf, HFC-32, R-452B, R-454A, R-454B, R-454C	Acceptable Subject to Use Conditions*
Non-Residential Dehumidifiers (New)	HFC-32	Acceptable Subject to Use Conditions*
Very Low Temperature Refrigeration (New)	R-1150 (ethylene)	Acceptable Subject to Use Conditions*
<b>Fire Suppression</b>		
Streaming Agent for non-residential use, except home offices and boats	2-BTP	Acceptable Subject to Use Conditions*
Total Flooding for use in normally unoccupied spaces under 500 ft <sup>3</sup>	2-BTP	Acceptable Subject to Use Conditions*
Total Flooding for use in normally unoccupied spaces	EXXFIRE®, Powdered Aerosol H (Pyroquench-α™)	Acceptable Subject to Use Conditions*

\*For specific use conditions for substitutes listed as Acceptable Subject to Use Conditions, consult the Proposed Rule.

### ACCEPTABLE ALTERNATIVES, WITH NARROWED USE LIMITS

End-Use	Substitutes	Narrowed Use Limits
<b>Refrigeration &amp; Air Conditioning</b>		
Very Low Temperature Refrigeration (New)	R-1150 (ethylene)	<ul style="list-style-type: none"> <li>R-1150 may only be used in equipment designed specifically to reach temperatures lower than -80 °C (-112 °F).</li> <li>Manufacturers of new very low temperature equipment would need to demonstrate that other alternatives are not technically feasible. They must document the results of their evaluation that showed the other alternatives to be not technically feasible and maintain that documentation in their files. This documentation, which does not need to be submitted to EPA unless requested to demonstrate compliance, "shall include descriptions of substitutes examined and rejected, processes or products in which the substitute is needed, reason for rejection of other alternatives, e.g., performance, technical or safety standards, and the anticipated date other substitutes will be available and projected time for switching to other available substitutes." (40 CFR 82.180(b)(3)).</li> </ul>

## ACCEPTABLE ALTERNATIVES, WITH MODIFIED USE CONDITIONS

End-Use	Substitutes	Conditions
<b>Refrigeration &amp; Air Conditioning</b>		
Residential and Light Commercial Air Conditioning and Heat Pumps—self-contained room air conditioners only (New)	HFC-32	Acceptable only for use in new equipment* specifically designed for the refrigerant, including conditions requiring: <ul style="list-style-type: none"><li>• Use consistent with UL Standard 60335-2-40, 3<sup>rd</sup> Edition, including testing, charge sizes, ventilation, usage space requirements, and certain hazard warnings and markings</li></ul>

\*Applies to new equipment manufactured after the effective date of a final rule based on this proposal.