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FACT SHEET

Proposed Rule 23 - Protection of Stratospheric Ozone: New and Revised Listings for the Significant New Alternatives Policy Program

Significant New Alternatives Policy 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 or toxicity of a substitute, as well as environmental risks such as ecosystem impacts, local air quality, or impacts on the global atmosphere.

Today's Action

Under this proposed rule, a number of substances would be listed as acceptable; acceptable, subject to use conditions; or acceptable, with narrowed use conditions, in the refrigeration and air conditioning sector and the foam blowing sector. This action also proposes to remove an acceptable subject to use conditions listing for the fire suppression sector where EPA has more recently listed the substitute as acceptable with no use restrictions. 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.

Proposed Rule

What is proposed in the Rule?

- Lists several substances as acceptable, acceptable subject to use conditions, or acceptable subject to narrowed use limits
- Clarifies status of acceptable fire suppression alternative

Which industrial sectors are included?

- Refrigeration & Air Conditioning
- Foam Blowing
- Fire Suppression & Explosion Protection

Who would be affected?

- Chemical producers
- Air conditioning and refrigeration equipment and foam manufacturers
- Some end users of equipment and products using refrigerants, fire suppressants, and foam blowing agents

When are public comments due?

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

Summary of Proposed Rule

ACCEPTABLE ALTERNATIVES

| End-Use | Substitutes* | Further Information |
|---|---|--|
| Foam Blowing | | |
| Extruded Polystyrene (XPS): Boardstock and Billet | Blends of 40 to 52 percent HFC-134a by weight and the remainder HFO-1234ze(E); Blends of 40 to 52 percent HFC-134a with 40 to 60 percent HFO-1234ze(E) and 10 to 20 percent each water and CO ₂ by weight; Blends with maximum of 51 percent HFC-134a, 17 to 41 percent HFC-152a, up to 20 percent CO ₂ and one to 13 percent water | These blends have GWPs of 580 to 750, depending on the specific composition. Blends containing 50 percent or more HFC-134a have been found to have acceptable flammable process stability under conditions of use (i.e., XPS extrusion). |

* Notwithstanding the unacceptable listings in general for blends of HFC-134a in XPS, EPA is proposing these specific blends of HFC-134a to be acceptable in this end-use. EPA is also proposing to add an exception to the unacceptable listings for HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof in XPS where a blend is specifically listed as acceptable.

ACCEPTABLE ALTERNATIVES, WITH USE CONDITIONS

| End-Use | Substitutes | Decision |
|--|--|---------------------------------------|
| Refrigeration & Air Conditioning | | |
| Residential and light commercial air conditioning and heat pumps (New) | R-452B, R-454A, R-454B, R-454C, R-457A | Acceptable Subject to Use Conditions* |
| Residential and light commercial air conditioning and heat pumps (New) excluding self-contained room air conditioners† | R-32 | Acceptable Subject to Use Conditions* |

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

† EPA previously listed R-32 as Acceptable Subject to Use Conditions for self-contained room air conditioners (April 10, 2015; 80 FR 19454).

ACCEPTABLE ALTERNATIVES, WITH NARROWED USE LIMITS

| End-Use | Substitutes | Decision | Narrowed Use Limits | Further Information |
|--|------------------------|---|--|---|
| Refrigeration & Air Conditioning | | | | |
| Retail food refrigeration – medium-temperature stand-alone units (New) | R-448A, R-449A, R-449B | Acceptable Subject to Narrowed Use Limits | Acceptable only for use in new medium-temperature stand-alone units where reasonable efforts have been made to ascertain that other alternatives are not technically feasible due to the inability to meet Americans with Disabilities Act (ADA) requirements. | Users are required to document and retain the results of their technical investigation of alternatives for the purpose of demonstrating compliance. Information should include descriptions of: <ul style="list-style-type: none"> • Process or product in which the substitute is needed; • Substitutes examined and rejected; • Reason for rejection of other alternatives, e.g., performance, technical or safety standards, ADA requirements; and/or • Anticipated date other substitutes will be available and projected time for switching. |

OTHER CHANGES

| End-Use | Change |
|--|---|
| Fire Suppression and Explosion Protection | |
| Total Flooding | Clarify that Powdered Aerosol E (FirePro™) is listed as acceptable, and that the previously issued use condition is no longer required as of October 4, 2018. |