HFC phase-down: End-uses and Alternatives

S.30 will phase out several major HFC uses following EPA's SNAP Rules 20 and 21.¹ The SNAP rules propose restrictions in an extensive but not exhaustive list of end-use categories. The sectors currently regulated are food refrigeration equipment, foam manufacture, stationary air-conditioning, vehicle air conditioning, and aerosol products. A separate phase out date was adopted for each specific end-use, based on EPA's assessment of the industry's ability to transition to HFC alternatives by that date. The SNAP rules also provide a list of approved alternatives for each sector. There are multiple alternatives for each use where HFCs are being replaced.

American chemical production companies have invested heavily to ensure that the HFC-alternatives are readily available. For example, one of these companies recently inaugurated a production plant that will triple the company's production of one of the most widely used HFC-alternatives.²

Below are illustrated examples of some of the end-uses regulated under S.30. A comprehensive list of the end-uses regulated, product descriptions and EPA-approved alternatives can be found in the attached appendix.

Product Name: Aerosol Propellants

Common Uses: Sprays

Substitutes available? Yes

EPA Information on Substitutes:

https://www.epa.gov/snap/substitut

es-propellants

Product Name: Rigid Polyurethane

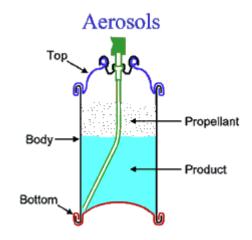
Appliance Foam

Common Uses: Insulation foam in domestic refrigerators and freezers.

Substitutes available? Yes

EPA Information on Substitutes:

https://www.epa.gov/snap/substitut es-rigid-polyurethane-appliance





¹ "SNAP" stands for the "Significant New Alternatives Policy" program, issued under Section 612 of the Clean Air Act). See https://www.epa.gov/snap/snap-regulations.

² https://www.coolingpost.com/world-news/chemours-commences-yf-production-at-ingleside/

Product Name: Rigid Polyurethane

Spray Foam

Common Uses: Insulation for roofing

and walls

Substitutes available? Yes

EPA Information on Substitutes:

https://www.epa.gov/snap/substitute s-rigid-polyurethane-spray



Product Name: Flexible Polyurethane

Common Uses: Foam furniture,

bedding, chair cushions, and shoe soles

Substitutes available? Yes

EPA Information on Substitutes:

https://www.epa.gov/snap/substitutes -flexible-polyurethane



Product Name: Integral skin

polyurethane

Common Uses: car steering wheels, dashboards, and shoe soles.

Substitutes available? Yes

EPA Information on Substitutes:

https://www.epa.gov/snap/substitutes -integral-skin-polyurethane



Product Name: Polystyrene extruded

sheet

Common Uses: Foam for packaging

and buoyancy or floatation.

Substitutes available? Yes

EPA Information on Substitutes:

https://www.epa.gov/snap/substitut es-polystyrene-extruded-sheet





Product Name: Polystyrene extruded

boardstock and billet

Common Uses: Insulation for roofing,

walls, flooring, and pipes

Substitutes available? Yes

EPA Information on Substitutes:

https://www.epa.gov/snap/substitut es-polystyrene-extruded-boardstockand-billet



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Product Name: Polyolefin

Common Uses: Foam sheets and

tubes.

Substitutes available? Yes

EPA Information on Substitutes:

https://www.epa.gov/snap/substitut es-polyolefin



Product Name: Phenolic Insulation

Board and Bunstock

Common Uses: Insulation for roofing

and walls.

Substitutes available? Yes

EPA Information on Substitutes:

https://www.epa.gov/snap/substitut es-phenolic-insulation-board-andbunstock



Common Uses: Industrial

refrigeration; aerodynamic or turbine type and move gas by converting kinetic energy to pressure energy

Substitutes available? Yes

EPA Information on Substitutes:

https://www.epa.gov/snap/substitut es-centrifugal-chillers

Product Name: Positive displacement chillers

Common Uses: Industrial cooling that can be air-cooled or water-cooled and use cylinders with pistons acting as pumps to increase refrigerant pressure

Substitutes available? Yes

EPA Information on Substitutes:

https://www.epa.gov/snap/substitute s-positive-displacement-chillers





