

Frequently asked questions about regulations governing production, use and replacement of ozone depleting solvents and their substitutes:

SOLVENTS COVERED UNDER THE PHASE-OUT OF OZONE DEPLETING CHEMICALS

Q. Is it true that methyl chloroform and CFC-113 have been phased out?

A. Yes. Under the Clean Air Act, the United States has banned production of methyl chloroform (1,1,1-trichloroethane) and CFC-113 as of January 1, 1996.

Q. How are HCFC solvents affected by the phase-out?

A. HCFC-141b was phased out as of January 1, 1997, and HCFC-225 has a production phase-out date of January 1, 2015. In addition to the production phase-out, EPA has issued certain use restrictions on HCFC solvents.

Q. Does “phase-out” mean I can’t use ozone-depleting chemicals (ODS) after that date?

A. No. The phase-out applies to chemical production and imports, not use. This means that, although virgin CFC-113 could not be manufactured after January 1, 1996, any materials held in inventory or recycled would be available for use. After a chemical’s production phase-out date, it becomes more difficult and expensive to buy. Certain ODS uses are also restricted. Recycling of CFCs used as refrigerants is in certain cases required. In the solvents area, use

restrictions on HCFC-141b is based on high ODP and on the availability of other substitutes.

Q. Are perchloroethylene, methylene chloride, or trichloroethylene part of the production phase-out?

A. No. Although these chemicals are chlorinated solvents like TCA and CFC-113, their atmospheric lifetimes are very short and they decompose before they can damage the ozone layer. As a result, they are not considered to be ozone depleters and are not targeted for phase-out under the Clean Air Act.

SNAP STATUS AND REVIEW PROCESS

Q. What does “SNAP” stand for?

A. EPA’s Significant New Alternatives Policy program. The SNAP program implements Section 612 of the Clean Air Act.

Q. What is the purpose of the EPA SNAP program?

A. Under SNAP, EPA is evaluating substitutes that companies want to use in place of ozone depleting chemicals, and making sure those chemicals won’t cause greater damage to human health and the environment than the ozone depleters they are replacing or than other available substitutes. Based on this evaluation, EPA then adds these substitutes to its lists of acceptable or unacceptable substitutes.

Q. Has EPA come out with the lists of substitutes that are either approved or restricted under SNAP?

A. Yes. EPA published its first set of SNAP decisions in the Federal Register (FR) on March 18, 1994 (59 FR 13044). EPA updates the lists regularly. Past FR updates with listings relevant to solvent substitutes are 59 FR 44240 (August 26, 1994), 59 FR 49108 (September 26, 1994), 60 FR 3318 (January 13, 1995), 60 FR 31092 (June 13, 1995), 60 FR 38729 (July 28, 1995), 60 FR 51383 (October 2, 1995), and 61 FR 4736 (February 8, 1996).

Q. Do I have to check with EPA to make sure each substitute solvent or process for every single use of CFC-113 or TCA is approved under SNAP?

A. No. EPA currently only reviews substitutes for ODS solvents in three key use sectors. Those three are solvent cleaning, aerosols, and adhesives, coatings and inks. EPA is not planning to review substitutes for minor uses of CFC-113 and TCA unless a significant environmental risk can be shown to exist. Uses currently not subject to review include: bearer media (for example, depositing lubricants on medical catheters), hydraulic system testing, plasma etching, mold release agents (for non-aerosol applications).

Q. What types of cleaning are covered under the “solvents cleaning sector”? Is textile cleaning or maintenance cleaning covered?

A. The solvents cleaning sector covers replacement for ODS solvents in degreasing and cold cleaning machines. Handwipes are not covered under SNAP, since it falls neither in the solvents cleaning definition nor is it an aerosol application.

Q. If I sell a solvent substitute for cleaning that I want to get approved by EPA, what should I do?

A. First check the list of acceptable substitutes under SNAP for cleaning. If your substitute is already on the list, you don't need to request EPA approval. EPA does not certify individual companies' products. The approvals are for specific solvents (e.g., trichloroethylene) or for classes of substitutes (e.g., aqueous cleaners).

APPENDIX

ACCEPTABLE CLEANING SUBSTITUTES UNDER SNAP

NPB is used for solvent vapor degreasing operations. The vapor degreaser contains heated NPB in a solvent reservoir or sump at the bottom, a condenser near the top, and freeboard above the condenser. Sufficient heat is introduced to boil the solvent and generate hot solvent vapor. Materials are immersed in vapors of boiling HyperSolve NPB to clean.

NPB vapor is heavier than air, displaces the air and fills the tank up to the condensing zone. The hot vapor condenses on the cooled condenser, maintains a fixed vapor level and creates a thermal balance. The parts are removed from the vapors, drained and dried.

NPB degreasing operations must follow these procedures:

- ◆ Work loads should not exceed designed degreaser capacity. Work should not occupy more than 50% of the open horizontal area of the machine unless the work permits easy passage of vapor through or around the machine.
- ◆ A tag is secured to each degreaser with maximum weight and volume of a single load expressed in terms of pounds per load and loads per hour.
- ◆ The vertical rate of entry and withdrawal of work loads should not exceed maximum degreaser design. The maximum degreaser design should not exceed 11 ft/min (3.4 m/min). Work loads are placed in free-draining non-porous baskets, trays, racks and positioned to eliminate solvent drag-out.
- ◆ Conduct all spraying of work loads in the vapor zone. Work loads remain in the vapor zone until condensation on the work loads has stopped.