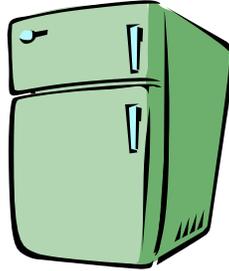


# APD ALERT

## REFRIGERANTS



### Purpose

The purpose of this alert is to inform acquisition personnel not to purchase equipment containing refrigerants that are soon to be phased out. Executive Orders 13423 and 13514, and Research, Education and Economics (REE) Policy and Procedure (P&P) 134.2 - Energy, Water, and Sustainability, require reduction in the use and release of ozone depleting substances. Agricultural Research Service (ARS) Facilities Division Engineering Bulletin Number 2 prohibits the specifying and installation of new equipment using R-22 and other hydrochlorofluorocarbon (HCFC) refrigerants. Chlorofluorocarbon (CFC) and HCFCs are ozone depleting substances. These refrigerants are found in some refrigerators, freezers, walk-in coolers, air conditioners, heat pumps, split systems, package units and chillers. HCFCs are in the process of being phased out of use in new equipment and some are already banned. CFCs are banned in new equipment. Replacement refrigerant will become expensive and hard to obtain as its manufacture is also phased out.

### Procedure

- Do not purchase any new equipment that uses R-22 or other HCFCs as refrigerants.
- If equipment using CFCs or HCFCs is being replaced or undergoing major repairs, do not replace it in kind. Replace it with equipment using ozone-friendly HFC refrigerants. Use alternatives to ozone depleting substances as approved by the Environmental Protection Agency (EPA) Significant New Alternatives Policy (SNAP) program. HCFC gas may be purchased for maintenance if it is not cost effective to replace existing serviceable equipment. Some equipment may be converted.
- Halon fire suppressants are prohibited.
- Recycle refrigerants. Recovery and recycling of refrigerants must be done by licensed and trained professionals. Do not vent them to the atmosphere.

## References

Executive Order 13423 is at <http://www.wbdg.org/ccb/FED/FMEO/eo13423.pdf>.

Instructions for implementing Executive Order 13423 are at:  
[http://www.fedcenter.gov/Documents/index.cfm?id=6825&pge\\_prg\\_id=20683&pge\\_id=3286](http://www.fedcenter.gov/Documents/index.cfm?id=6825&pge_prg_id=20683&pge_id=3286).

Executive Order 13514 is at <http://edocket.access.gpo.gov/2009/pdf/E9-24518.pdf>.

REE Energy, Water and Sustainability P&P 134.2 is at:  
<http://www.afm.ars.usda.gov/ppweb/PDF/134-02.pdf>.

ARS Facilities Division Engineering Bulletin Number 2 is at:  
<https://arsnet.usda.gov/sites/AFM/FD/FEB/FEB%20STANDARDS/Engineering%20Bulletins/Engineering%20Bulletin%20No.%202%20%20Use%20of%20R-22%20in%20HVAC%20Applications.pdf>.

You can find a list of CFCs at: <http://www.epa.gov/ozone/science/ods/classone.html>.

You can find a list of HCFCs at: <http://www.epa.gov/ozone/science/ods/classtwo.html>.

Hydrofluorocarbon (HFC) are shown in the table of non-ozone depleting substances at <http://www.epa.gov/ozone/geninfo/gwps.html>.

The EPA SNAP Web site is at:  
<http://www.epa.gov/ozone/snap/refrigerants/lists/114cent.html>.

## APD Point of Contact

If you have any questions regarding this alert, please contact the Acquisition Programs and Oversight Branch (APOB), on 301-504-1725, or via e-mail at [APOB@ars.usda.gov](mailto:APOB@ars.usda.gov).

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