Title VI of the 1990 Amendments

- The amendments built on the market-based structure and requirements that were already in EPA’s regulations to phase out the production of substances that deplete the ozone layer.

- The 1990 amendments required a complete phase out of CFC’s and halons with interim reductions and some related changes to the existing Montreal Protocol.
Listing

- Under these provisions, EPA had to list all regulated substances with their ozone-depletion potential, chlorine/bromine loadings, atmospheric lifetimes, and global warming potentials within 60 days of enactment.

- EPA is required to add to the list at least every 3 years for substances meeting specified criteria.
Phase-out

- Phase-out dates similar to Montreal Protocol for Class I chemicals (2000 for CFC, halons and carbon tetrachloride; 2002 for methyl chloroform).

- Class II chemical (HCFC) substances phased out by 2030.

- Regulations for Class I substances required within 10 months of enactment. Class II substances by December 31, 1999.
Substitutes

- The 1990 amendments also required EPA to publish a list of unsafe substitutes for Phase I and Phase II chemicals and to ban the use of unsafe substitutes.

- Safe Alternatives: Requires prior notice of sale of new and existing chemicals for significant new use as substitutes.
Banned Products

- The 1990 amendments required that nonessential products releasing Class I chemicals be banned by 1992.

- In 1994, a ban went into effect for aerosols and non-insulating foams using Class II chemicals, with exceptions for flammability and safety.

- Regulations for this purpose were required to be promulgated by 1991 with an effective date no later than 1993.
Other Provisions of Title VI

- **Exchange**: Requires a net environmental benefit from trades of allowances to produce controlled substances.

- **Recycling/Use Limits**:  
  - Restricted use and emissions to LAER  
  - Required maximum recycling and safe disposal for CFC refrigerants by 1992  
  - All other Class I and II substances by 1994  
  - Illegal to vent Class I or II refrigerants after July 1992  
  - Prohibition on venting any environmentally harmful substitute refrigerant after 5 years
Other Provisions of Title VI

- **Mobile Air Conditioners:**
  - Certification of equipment and personnel.
  - Ban on small containers (except certified personnel).

- **Nonessential Products:**
  - Banned nonessential products that result in releases of Class I substances by 1992.
  - Beginning 1994, banned use of Class II substances in aerosols and non-insulating foams, with exemptions for flammability and safety.
Other Provisions of Title VI

- **Labeling:**
  - Mandatory warning labels on all containers of products made with Class I or Class II substances (depending in some cases, on availability of safe alternatives).
  - Requirements applicable to containers of Class I and II substances and to products containing Class I substances required within 18 months after enactment, effective 30 months later.
  - All products must be labeled by 2015.
Other Provisions of Title VI

- **Procurement**: Required all Federal Agencies to amend their procurement regulations to maximize the use of safe alternatives for Class I and II substances.

- **Methane**: EPA was required to publish 5 reports to Congress by 1992 and 1 follow-up report by 1994.
End of Clean Air Act 101
Module 6
Stratospheric Ozone