

## **Other fluorinated gases: what are they used for and why included in the rule?**

### Sources:

1. Fluorinated greenhouse gas definition: Section 98.6 of Proposed Rule, page 16621 of Federal Register notice
2. Rationale for Selection of GHGs to report: Section IV. A. of Proposed Rule, page 16464 of F.R.
3. 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Methodology Report, Chapter 8.
4. *Silicon Valley manufacturers must reduce greenhouse gas emissions*, Margot Roosevelt, LA Times, February 27, 2009.

EPA relied on the work of the IPCC when selecting which GHGs to report. The *2006 IPCC Guidelines for National Greenhouse Gas Inventories* include several fluorinated gases because they are long-lived in the atmosphere and have high Global Warming Potential (GWP). All of the gases in EPA's Proposed Rule definition of fluorinated greenhouse gases are included in the IPCC Methodology Report, except hydrofluoropolyether. These gases are used as aesthetics, as heat transfer fluids, and in the electronics industry, e.g., Fluorinert is an electronics coolant liquid produced by 3M. Other examples include nitrogen trifluoride (NF<sub>3</sub>) and hydrofluorinated ethers (HFEs). The GWP of NF<sub>3</sub> is 17,200 and HFEs range from 11 to 14,900 GWP. In addition, California began regulating emissions of sulfur hexafluoride and other fluorinated gases in February 2009.