PFOA Stewardship Program Update

Purpose: Information
Submitted by: USA
In January 2006, EPA invited eight major companies in the fluoropolymer and fluorotelomer industries to commit to a voluntary program with global goals.

Participating companies
- Arkema, Asahi, Ciba, Clariant, Daikin, DuPont, 3M/Dyneon, Solvay Solexis
- Accepted invitation by March 1, 2006
- Submitted baseline year data on emissions and product content by 10/31/06
- Report annual progress toward goals each succeeding October
- Report progress in terms of both U.S. and global operations
Goals

- Commit to achieve, no later than 2010, 95% reduction in both facility emissions to all media and product content of PFOA, PFOA precursor chemicals, and related higher homologue chemicals, measured from a year 2000 baseline.

- Commit to working toward elimination of PFOA, PFOA precursors, and related higher homologue chemicals from emissions and products by 2015.

2007 Progress Reports

- All companies submitted their 1st progress reports on reductions in emissions and product content by 10/31/07:
  - Report period: baseline year to end of 2006
  - Submitted both non-CBI and CBI reports.

- EPA prepared summary tables of the non-CBI company progress reports; still reviewing the CBI reports.

- Non-confidential company progress reports and EPA’s summary tables of the reports are publicly available:
  - EPA website: www.epa.gov/oppt/pfoa
Results

- Program does not specify how goals are to be achieved
  - Corporate strategies included control/treatment technologies, process changes, product reformulation, new chemical development

- Reduction in emissions
  - 4 companies reported greater than 90% reductions of PFOA in U.S.
  - 5 companies reported greater than 74% reductions of PFOA outside U.S.

- Reduction in product content
  - Trend toward C8 alternatives
    - To date, companies have submitted over fifty new chem alternatives to EPA for review
    - 2006: Asahi introduced a new line of substitute telomer products that is free of PFOA and PFOA precursors
    - 2007: DuPont announced plans to “eliminate their need to make, buy or use PFOA by 2015”
    - 2007: 3M announced their intent to introduce in 2008 a PFOA substitute to be used in the manufacture of fluoropolymers

Outcome from Reductions

- In August 2007, a U.S. Centers for Disease Control report showed significant reductions in human blood levels of PFOS and PFOA from 1999/2000 compared to the most recent data in 2003/2004 in a representative sample of the US population
  - The geometric mean for PFOA was reduced by 25% over this period (PFOS in human blood was reduced by 32%)
  - Report concludes that these reductions most likely are related to the changes brought about by EPA efforts on these chemicals and other related efforts by government and industry
  - A complete copy of the report can be found at http://www.ehponline.org/docs/2007/10598/abstract.html
Future

- Significant reductions thus far put industry on target to meet the 95% reduction goal by 2010; additional reductions are anticipated in coming years.

- The Stewardship Program will be the umbrella for ongoing and new activities on PFOA, PFCAs, and precursors in the U.S.

- The U.S. encourages other countries to support participating companies and consider similar action.