EPA Activities/Issues on Fluorosurfactants

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Issues and Status

- Discovery of perfluorooctyl sulfonates (PFOS) in humans and wildlife worldwide.
- Concern: Data indicate PFOS chemicals are persistent, bioaccumulative, and toxic.
- 3M phasing out 90 PFOS chemicals by 2003; EPA proposed regulation to follow voluntary phaseout.
- EPA has concerns on related chemistries (PFOA, telomers); assessment and research are underway.
- PFOS, PFOA, and telomers are used in MilSpec AFFF products.

Status of PFOS Rulemaking

- EPA published Proposed Significant New Use Rule (SNUR) on 90 PFOS chemicals (65 FR 62319, 10/18/2000), consonant with 3M phaseout.
- Proposed SNUR is *not* a ban:
  - Would require companies to file notice with EPA 90 days before beginning new manufacture or import of listed PFOS chemicals. EPA could grant, deny, or impose conditions on intended use.
  - Would *not* affect continued use of stocks of chemicals obtained before the end of the phaseout period.
- Comment period extended to 1/1/2001.
- Public meeting 3/27/2001, Sheraton Crystal City.

Status of PFOS Rulemaking

- 25 comments filed.
- Most comments challenge legal basis of proposed SNUR; also request exemptions for specific uses of PFOS chemicals as being essential, low volume, and low exposure.
- Claimed essential uses include photoresists in semiconductor manufacture; aviation hydraulic fluids; and some photolithography.
- Comments currently under review.
- Public meeting on 3/27/2001 provides opportunity for clarification of comments.

Related Chemistry Concerns

- PFOA & telomer chemicals raise similar concerns:
  - Known persistence.
  - PFOA toxicity data in public literature.
  - Question: similar bioaccumulative potential?
  - Question: similar fate and transport?
  - Question: similar widespread exposure?
- EPA hazard assessment on PFOA underway; preliminary conclusions likely by June 2001.
- Telomer producers began voluntary testing in 2000; data to be available in 2002.
- Fluoropolymer manufacturers began additional testing on PFOA/APFO in 2001.

Future EPA Actions

- PFOS:
  - Assess and respond to comments on proposed SNUR for 90 3M phaseout PFOS chemicals.
  - Consider need/options for action on other PFOS chemicals.
- PFOA:
  - Complete preliminary hazard assessment by June 2001.
  - Assess new data as received.
  - Identify needs/options for action.

Future EPA Actions

- Telomers:
  - Begin EPA review of existing data.
  - Review submissions from voluntary industry testing program in 2001-2002.
- International Activities:
  - Participate in initial assessment of PFOS by Organization for Economic Cooperation and Development; further action to be determined.

Future EPA Actions

- Regulatory actions available under the Toxic Substances Control Act include:
  - Testing requirements (section 4).
  - SNURs, new chemical reviews (section 5).
  - Manufacturing, use, disposal rules (section 6).
  - Information submission (section 8).
- TSCA uses an "unreasonable risk" standard balancing hazard, exposure, benefits, costs, availability of alternatives at time of proposal.

Future Actions

- Voluntary activity may be expected in lieu of or while regulatory activities are pending.
  - If assessments raise liability concerns, more companies may elect to discontinue chemicals.
  - New chemicals are being submitted to EPA for review as potential substitutes for PFOS/PFOA.
    - Presence of new chemical alternatives may affect TSCA "unreasonable risk" determinations.

AFFF Implications

- Current EPA activities would *not* restrict continued use of PFOS-based AFFF stocks obtained prior to the 12/31/2002 phaseout.
- Current EPA activities *would* prevent manufacture or import of PFOS after phaseout, *including* PFOS-based AFFF, *unless* 90-day notice filed and approved.

AFFF Implications

- Non-PFOS-based AFFF products formulated with PFOA or telomers *may be affected* by ongoing EPA reviews of these related chemistries, and *may be subject* to future regulatory or voluntary risk management actions.
  - Persistence is known: information on toxicity, bioaccumulative potential being assessed or collected.
  - Initial assessments will be completed in 2001-2002.
  - If undertaken, regulatory proceedings average 2-5 years.

AFFF Implications

- A program to seek, test, and consider long-range alternatives to current fluorosurfactant-based AFFF would be prudent.
  - Health and environmental concerns generally argue for a move away from persistent chemicals where possible.
  - Ongoing EPA activities provide a multi-year window for development, evaluation, and qualification of alternatives, while still allowing access to and use of stocks of currently accepted chemicals.

For Further Information

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- Karen Lannon, 202-260-2797, *lannon.karen@epa.gov*
- For data CDs from PFOS file (AR-226), TSCA NCIC, 202-260-7099, Monday-Friday, noon to 16:00 Eastern time.
- To attend 3/27/2001 PFOS SNUR public meeting: Annette Washington, 202-260-3515, *washington.annette@epa.gov*