

MEETING LOG

OFFICE OF
THE SECRETARY

2003 JUL -8 A 11: 33

Meeting Date: June 25, 2003

Location: U.S. Consumer Product Safety Commission Headquarters,
Bethesda, MD

Subject: Telomers Research Program, E.I. duPont de Nemours & Company

Log Entry: Treye A. Thomas, Ph.D., Directorate for Health Sciences

Attendess: see attached

The Telomers Research Program (TRP) is a consortium of companies including: E.I. duPont de Nemours & Company, Daikin Industries, Asahi Glass, and Clariant GmbH, that requested an audience with CPSC staff to present their current research efforts to determine consumer exposures to PFOA from articles treated with their products. This group is currently involved in an Environmental Protection Agency workgroup that is overseeing the data collection process for the determination of PFOA exposures and outlining approaches and methods for environmental monitoring and consumer product testing. Steve Korzinowsky, representing TRP, gave a presentation outlining the research efforts of the TRP. A copy of the Mr. Korzinowsky's presentation was submitted to CPSC staff.

In the afternoon, David Rurak spoke on behalf of E.I. duPont de Nemours & Company Perfluorinated Compounds group. Mr. Rurak expressed his desire to work with CPSC staff to answer any questions concerning the use or exposure to PFOA from products treated with perfluorinated compounds.



CPSC 6 (b)(7) Cleared 7-15-03
 _____ No. Mfrs/Prvtblrs of
 Products Identified
 _____ Exempted by _____
 _____ Firms Notified,

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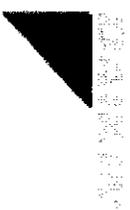
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TRP Telomer Research Program

**Letter of Intent Commitments
and
ECA Framework Discussion**

**for
CPSC
25 June 2003**



TRP Presentation Outline

- **TRP Background**
- **Letter of Intent (LOI) Perspectives, Objectives and Approach**
- **LOI Commitments Outline**
- **LOI Elements Review**
- **Next Steps**

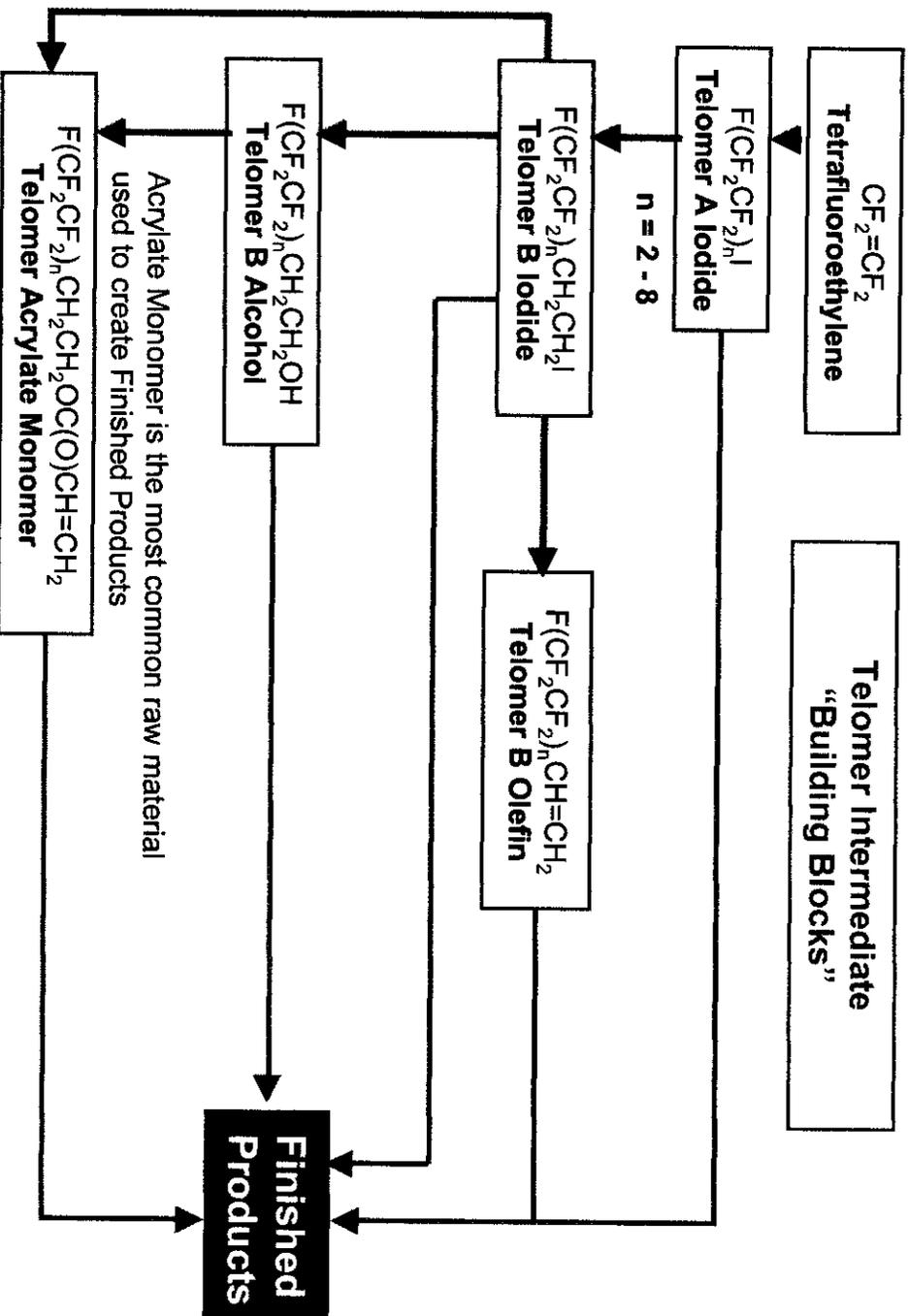
The Telomer Research Program is ...

- **a *Science-Focused* research consortium formed in August 2000 and funded under a contractual agreement**
- **Asahi Glass (Japan), Clariant (Germany), Daikin Industries (Japan), and DuPont (USA)**
- **administered by the RAND Corporation (USA)**

The Telomer Research Program ...

- **Was founded three years ago in response to the need to develop data on telomer products**
 - Developing test methods and protocols that can be used by member companies in studies on their own products
 - Conducting its research program with a focus on three parallel work-streams: *toxicology, pharmacokinetics, and environmental fate and effects studies.*
 - Developing the sophisticated analytical techniques required to study these types of compounds in complex matrices.
- **Has this year refocused on creating and carrying out the commitments of the TRP LOI**

Telomer Manufacturing Process : A Generic View



- Actual process and manufacturing practices vary by company
- PFOA is not used or added in these processes
- Generally, these processes are closed and PFOA creation and/or emissions are expected to be at very low levels

Telomer Research Program

Telomer 8-2 Alcohol Pharmacokinetics Studies Timeline

* This is a proposed timeline and subject to change. As of April'03

Radiolabeled Telomer 8-2 Alcohol = F(CF₂)₇¹⁴CF₂CH₂CH₂OH

	2002		2003												2004												
	D	J	F	M	A	M	J	J	A	S	O	N	D	D	J	F	M	A	M	J	J	A	S	O	N	D	
Method Development & Material Handling																											
Issue Protocol																											
Pilot Experiments																											
Review Pilot Data with Sponsors																											
Main Study : Absorption																											
Main Study : Distribution																											
Main Study : Excretion																											
Supplemental Experiment, Biliary Elimination (if required)																											
Supplemental Experiment, <i>in-vitro</i> metabolism (if required)																											
DRAFT REPORT																											

* metabolism included in main study line items

Telomer Research Program

Telomer 8-2 Alcohol = $F(CF_2)_8CH_2CH_2OH$

Telomers Research Program Environmental Fate & Effects Work Plan

* This is a proposed work plan and subject to change. As of April'03

Tier I	Water Solubility	Sorption	UV/Vis	Vapor Pressure	Volatility HLC, K_{oa}	Hydrolysis
Tier II	Biodeg. Screening Cold	Aerobic Biodeg. Act. Sludge	Anaerobic Biodeg. Act. Sludge	Indirect Photolysis in Air	Acute Ecotox Studies Fish, Daphnia	Chronic Nematode Ecotox
	Aging / Sequester	Adsorption / Desorption	Radiolabel Study Material	OECD 207 Acute Ecotox Earthworm	OECD 208 Acute Ecotox Plant Seedling	
Tier III	Water-Sediment Biodeg.	OECD 303 WWTP Simulation	Chronic Ecotox Daphnia	Bioconcn. Factor - Fish	Chronic Ecotox Algae	Chronic Ecotox Fish
	Incineration		Sediment Repro C. ripanus	Sediment Repro L. variegatus BSAF		

X = Work Complete ; ✓ = Work Ongoing / Underway

Fate Effects Physical Properties

TRP Perspectives

- **TRP member companies do not add or use PFOA in their Telomer-based products and processes**
- **Exposure to PFOA in the workplace from Telomer-based products is therefore expected to be extremely small**
- **Environmental releases from Telomer-based processes are also expected to be extremely small**
- **Therefore the focus for the Telomer LOI efforts is on potential transformation in the environment**

TRP LOI Overall Program Objectives

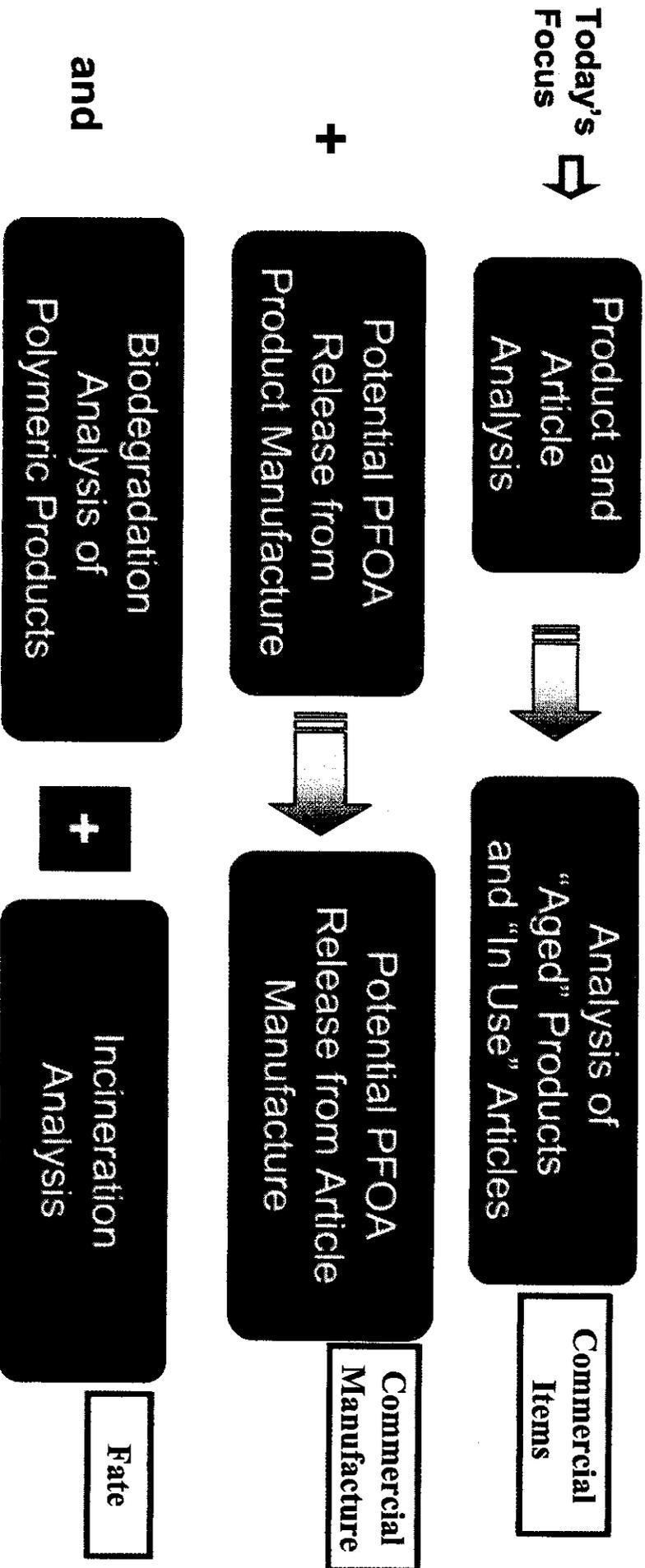
- **Investigate the potential formation and/or release of perfluorooctanoic acid (PFOA)**
 - **from Fluorotelomer-based polymeric products and consumer articles treated with such products and**
 - **from manufacturing operations making or using these products**
- **Better understand telomer-based polymeric product environmental fate and disposal**

TRP Approach to the LOI and ECA Processes

- **Focuses on relevant releases and exposures during the life-cycle of telomer-based products and articles**
 - * Products and treated articles were chosen using criteria such as market end use, chemistry type/class, chemical volume, and potential for exposure
- **Focuses on fate and monitoring studies based on release and exposure analyses and considerations**
- **Considers testing and measurements in an iterative step-wise approach triggered by improved knowledge gained**

TRP LOI Commitments Outline:

Potential Future Sources of PFOA*



*Analyses on Polymeric Products for Carpet, Textile, and Paper Segments

Most of these analyses will be done in parallel, not sequential

ECA Framework Item # 1, LOI # 1

Comprehensive Telomer market information: CAS Numbers; Chemical Names; Synthetic Sequences; Production/Import Volumes; Uses/Applications

Summary of LOI Commitments	LOI or ECA for Additional Work?	Nature of Additional Work
Provide above information to EPA by each member company under CBI via documents and presentations	LOI	All detailed and comprehensive information already provided to EPA under LOI

Telomer Research Program

ECA Framework Items # 7/8, LOI # 1

Presence of PFOA, Telomer 8-2 alcohol, and other precursors in telomer-based products and treated articles

Summary of LOI Commitments	LOI or ECA for Additional Work?	Nature of Additional Work
Analyze for PFOA in each of the 12 polymeric products. Method development underway.	LOI	Analyze for Telomer 8-2 alcohol in the cited products. A validated method for alcohol analysis will need to be developed.
Analyze for PFOA in each of the treated articles - carpet, textile, paper - using the 12 polymeric products. Method development underway.	LOI	None at this time. Re-evaluate based on results from degradation, release estimate, and mill pilot study work.
Fire Fighting Foams are not part of the TRP LOI		

ECA Framework Item # 9, LOI # 2

Presence of PFOA, Telomer 8-2 alcohol, or other potential PFOA precursors emitted from “aged” products and “in-use” telomer-treated articles

Summary of LOI Commitments	LOI or ECA for Additional Work?	Nature of Additional Work
TRP will analyze for PFOA in “aged” products initially using elevated temperature studies	LOI	Analyze for Telomer 8-2 alcohol in the cited products. A validated method for alcohol analysis will need to be developed.
TRP will analyze for PFOA for “in-use” articles. Studies simulating real world conditions will be conducted.	LOI	Re-evaluate based on results from degradation, release estimate, and mill pilot study work.

For this analysis, “aged” means the storage and distribution of products and “in-use” means the distribution and use of the treated articles

Analysis of “Aged” Products and “In Use” Articles*

“Aged” Products

- Measure PFOA Only in Aged Products; Temperature; No Photolysis

“In-Use” Articles

- Temperature aging on treated carpet, textiles and paper
- Photolysis on treated carpet, textiles and paper
- Abrasion on treated carpet and textiles - as applicable
- Washing on treated textiles - as applicable
- Dry cleaning on treated textiles - as applicable
- Hot water extraction cleaning on treated carpet - as applicable
- PFOA Volatility - considered but not studied

***Please see 9 May'03 submission to US EPA for details on each of these proposed items**

Conclusions

- **TRP's LOI is a comprehensive document which addresses a majority of the specified ECA Framework's Telomer needs**
- **The most expeditious method to conduct work is through the current LOI**
- **By employing a technically sound, step-wise testing approach, all parties' interests are better served**

Next Steps from 23-24 June EPA Meetings

- **Work to create a “public face” on the product information submitted to EPA under CBI for the LOI**
- **Create a first-step decision tree on the ‘product and articles analysis’ ECA items # 7, 8, and 9**
- **Create a summary document of information submitted to docket related to the LOI and 9 May 2003 submissions**
- **Technical teams from TRP, EPA, and Other Parties to discuss appropriate biodegradation methods and timing for testing**
- **EPA to provide incineration method framework to TRP for use in developing appropriate testing methods and protocols**