

# **In re: Aqueous Film-Forming Foam Products Multi-District Litigation**

## **MDL No. 2873**

BARON & BUDD, PC  
COSSICH, SUMICH, PARSIOLA & TAYLOR, LLC  
SLACK DAVIS SANGER, LLP  
LAW OFFICES OF SNAPPER CARR

Several thin, white, parallel diagonal lines are positioned on the right side of the slide, extending from the middle towards the bottom right corner.

# THE FIRMS

## **Baron & Budd, P.C.**

Environmental Law Group

Number of Attorneys: 12

Focus: Representing Public Entities in Cost Recovery Actions

Specialty: Use of Product Liability, Negligence, Public Nuisance and Consumer Statutes Against Chemical Manufacturers.

Clients: States, Counties, Municipalities/Cities and Water Districts  
(Represented well over a 1,000 public entities)

Types of Chemicals: MTBE, Atrazine, 1,2,3 TCP, TCE, PCB and PFAS

Other: Oil Spills and Wildfires

Results: Recovered approximately 3 Billion for our clients, including recent order preliminarily approving \$500 million class action settlement for Long Beach, Chula Vista, San Diego, San Jose, Oakland, Berkeley and Los Angeles County, as well as other cities and counties across the country against Monsanto for PCB contamination

Awarded Law360 Environmental Group of the Year - 2020

# THE FIRMS

## **Cossich, Sumich, Parsiola & Taylor, LLC**

Number of Attorneys: 11

Focus: Representing public and private entities in complex environmental litigation

Specialty: Environmental Law, Multi-District Litigation, Complex Litigation, Class Actions, Business Litigation, Insurance Litigation

Clients: States, Counties, Municipalities/Cities, Public and Private Water Providers

Types of Cases: PFAS, TCE, Oil Spills, Environmental Damages, Class Actions, Multi-District Litigation, Complex Litigation

Results: Recovered approximately 1 Billion for our clients

# AQUEOUS FILM-FORMING FOAM (AFFF)

As early as the 1960s, PFAS have been used in AFFF, a water-based foam developed to extinguish Class B (flammable liquid) fuel fires at airports fire stations, fire training facilities and military bases, among other places.





# PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)

PFAS is a family of man-made chemicals that includes PFOS and PFOA. PFAS have been used worldwide since the 1950s in industry and consumer products, such as:

- Non-stick cookware
- Firefighting foams
- Water-repellent & stain-resistant fabrics
- Cosmetics
- Food packaging
- Other products that resist grease, water, and oil



**Stain- & water-  
resistance  
treatments**



**Nonstick  
cookware**



**Waterproof  
apparel**



**Cleaning  
products**



**Firefighting  
foam**



**Takeout  
containers**



**Carpets &  
textiles**

PFAS can migrate into the soil, water, and air. Most PFAS break down very slowly over time, so they remain in the environment and can build up in people, animals, and the environment over time. Because of their widespread use and their persistence in the environment, PFAS are found in the blood of people and animals all over the world.

***“FOREVER CHEMICALS”***

Several thin, parallel white lines of varying lengths and orientations are positioned in the lower right quadrant of the slide, creating a modern, abstract graphic element.

# MAJOR SOURCES OF PFAS

- ▶ Existing and Former Department of Defense Military Installations
- ▶ Airports
- ▶ Fire Training Facilities
- ▶ Superfund/RCRA Sites
- ▶ Landfills
- ▶ Electroplating
- ▶ Oil Refineries & Petrochemical Plants

# IN RE: AQUEOUS FILM-FORMING FOAM PRODUCTS LIABILITY LITIGATION

## MDL NO. 2873

**COURT:** U.S. District Court for the District of  
South Carolina, Charleston Division

**MDL JUDGE:** Honorable Richard M. Gergel

**TYPES OF PLAINTIFFS IN THE MDL:**

States & Territories

Public & Private Water Providers

Individual Well Owners

Property Damage

Medical Monitoring

Personal Injury



# FORMATION OF THE AFFF MDL

The Judicial Panel on Multidistrict Litigation (JPML) consolidated those cases that allege, in part, “that AFFF products used at airports, military bases, or certain industrial locations caused the release of PFOA or PFOS” into the environment.

The JPML found the cases to contain common “factual questions concerning the toxicity of PFOA and PFOS and their effects on human health; the chemical properties of these substances and their propensity to migrate in groundwater supplies; the knowledge of the AFFF manufacturers regarding the dangers of PFOA and PFOS; their warnings, if any, regarding proper use and storage of AFFFs; and to what extent, if any, defendants conspired or cooperated to conceal the dangers of PFOA and PFOS in their products.”

# MDL STATISTICS

States & Territories – 17

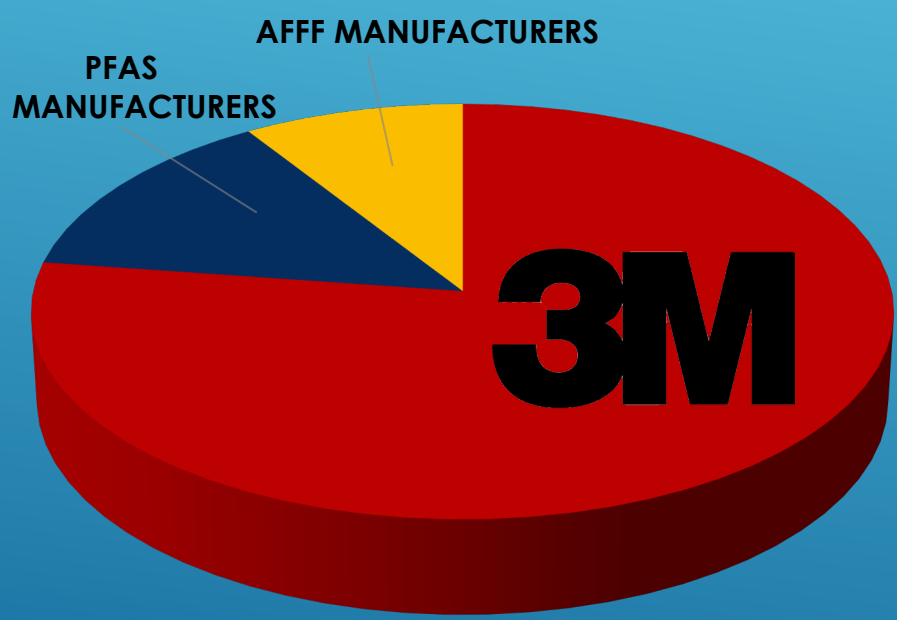
Water Providers – 200+

Airport / Fire Training  
Facilities – 50

Personal Injury – 2,755

Several thin, white, parallel diagonal lines are positioned in the bottom right corner of the slide, extending from the right edge towards the center.

# KEY PLAYERS



DEEPWATER  
CHEMICALS

BASF

TYCO FIRE

NATIONAL  
Foam

CHEM GUARD

CLARIANT

BUCKEYE

3M  
COMPANY

ARKEMA


E. I. DuPONT DE NEMOURS  
& COMPANY

KIDDE

CHEM DESIGN  
PRODUCTS  
INC.

DYNAX

# STATUS OF THE MDL

- ❖ Over 4 years in
  - ❖ Full Discovery of the Manufacturing Defendants: over 100 depositions taken
  - ❖ Defendant and third-party overall document productions: 4,358,661 documents and 34,944,062 pages
  - ❖ Aside from the Bellwether Plaintiffs, Defendants are not entitled to discovery from the other Plaintiffs except a Fact Sheet
  - ❖ First Public Water Provider Bellwether Trial set for June, 2023
- 
- A series of three parallel white diagonal lines extending from the bottom right towards the center of the slide.

# BELLWETHER CASES

In Spring 2021, 10 public water provider cases were selected for the Tier 1 Bellwether discovery pool.

Cossich, Sumich, Parsiola & Taylor (CSPT) represents 5 of the 10 water provider cases that were selected.

After undergoing initial Tier 1 discovery, the pool of 10 cases was narrowed down to 3 bellwether cases in Fall 2021.

CSPT represents 2 of the 3 cases selected for Tier 2 bellwether discovery.

Fact discovery in the Tier 2 Water Provider bellwether cases closed February 21, 2022.

Tier 2 bellwether discovery, including expert depositions, concluded on August 16, 2022.

Trial will begin in the City of Stuart bellwether case in June 2023.

Several white lines of varying lengths and angles are positioned in the bottom right corner of the slide, creating a modern, abstract graphic element.



**WHAT DID 3M AND DUPONT KNOW?**

# THE DEVIL WE KNOW....

## INTEROFFICE MEMORANDUM

Date: 25-Oct-1991 02:51pm  
From: ANTHONY J. LUNYI PLAYTIS  
PLAYTIS  
Dept: POLYMERS SHELEA  
Tel No: 304-863-8228

TO: Roger J. Zipfel

( ZIPFEL )

Subject: Toxicity Information

I am sending to you by paper mail copies of toxicity summaries for ammonium perfluorooctanoate and ammonium perfluorononanoate, and an MSDS for perfluorodecanoic acid. Once you've had a chance to look at them, let's talk about them.

My impression is that their toxicities are very similar, but C8 is by far the most well-studied of the three. C8 is the devil we know, and C9 & C10 are the devils we don't know. If we were to start using them in large amounts, we would want to ask Haskell Lab for some assistance in setting exposure limits.

“My impression is that their toxicities are very similar, but C8 is by far the most well-studied of the three. C8 is the devil we know....”

FC-95, FC-143 and FM-3422 - 90 Day Subacute Toxicity Studies  
Conducted at IRDC - Review of Final Reports and Summary

OVERALL SUMMARY AND RECOMMENDATIONS

FC-95 was the most toxic of the three compounds studied and certainly more toxic than anticipated. It produced mortalities in rats at a dietary dose of 100 ppm ( $\approx 10$  mg/kg/day) and in monkeys at an oral dose of 4.5 mg/kg/day. The primary target organs in rats were the liver, hematopoietic tissues and upper gastrointestinal tract and in monkeys, the gastrointestinal tract although no pathological lesions were reported. FC-143 appeared to be the least toxic of the three compounds studied and produced no mortalities in rats at dietary doses as high as 1000 ppm ( $\approx 100$  mg/kg/day). However, definite evidence of liver toxicity was seen at the high dose. In monkeys, FC-143 caused deaths at oral doses of 100 (4/4) and 30 (3/4) mg/kg/day and evidence of effects on hematopoietic tissue at these lethal doses. Like FC-95 and FM-3422, FC-143 also produced clinical evidence of gastrointestinal toxicity but no associated pathological lesions. FM-3422 caused deaths in rats at dietary doses of 1000, 3000 and 10,000 ppm ( $\approx 100$ , 300 and 1000 mg/kg/day respectively) and in monkeys (1/4) at an oral dose of 30 mg/kg/day. The primary target organ in rats appeared to be the liver although there was some gross evidence of kidney and upper gastrointestinal tract involvement as well. In monkeys, the gastrointestinal tract was affected clinically, but there were no pathological lesions reported at necropsy.

The goals of conducting these 90 day subacute toxicity studies of 1) defining doses for chronic experiments and 2) obtaining general toxicological information on the three compounds appear to have been met. However, several questions surfaced that deserve further clarification. The apparent effect of FC-95 on the liver and hematopoietic system of rats should be studied for reversibility. The question of clinical gastrointestinal signs in monkeys with all three compounds without any gross or microscopic pathology is certainly perplexing, but may not be worth further pursuit since the oral route is not a likely one for man. If another study with FC-143 is conducted to help define the gastrointestinal and hematopoietic effects, the dog should be considered. Since the most likely route of exposure in plant workers is by inhalation, an inhalation study, probably with FM-3422, could be useful in evaluating any effects via pulmonary exposure. Marv Case and Bill McCormick are preparing protocols for follow-up to the toxicity questions mentioned.

Because of the apparent persistence of these fluorochemicals in the body, the most important question remains possible long term effects. Although lifetime rodent studies have limitations in predicting chronic effects (carcinogenesis) for man, they are still considered the most reliable indicators available. Unless there are adequate data through human epidemiological evaluations that can reasonably assure relative safety of these compounds following long term exposure, lifetime rodent studies should be undertaken as soon as possible. It may be possible to limit the number of compounds evaluated in lifetime rodent studies to one or two if metabolic data can be used to establish a common linkage between compounds.

# 1979 3M SUMMARY OF INTERNAL TOXICITY STUDIES

FC-95 was the most toxic of the three compounds studied and certainly more toxic than anticipated. It produced mortalities in rats at a dietary dose of 100 ppm ( $\approx 10$  mg/kg/day) and in monkeys at an oral dose of 4.5 mg/kg/day. The primary target organs in rats were the liver, hematopoietic tissues and upper gastrointestinal tract and in monkeys, the gastrointestinal tract although no pathological lesions were reported. FC-143 appeared to be

(FC-95 = PFOS)

# 1999: 3M ENVIRONMENTAL SPECIALIST, RICHARD PURDY INTERNAL EMAIL TO 3M LEADERSHIP

*Rich's response to Tom:*

Plan! That is the same stalling technique you have been using for the last year. There is a high probability that PFOS is killing marine mammals and you want another plan when we could have had data to support the risk assessment long ago. You were given a plan in 1983. Again in the early 90s. And you authorized no testing.

As I recall we obtained data that eaglets contain PFOS in their plasma last April. Then you as part of an upper management team dispersed the team that initiated the collecting of that data as part of their plan. And then you said we had to put together a plan under the Battelle umbrella. As of now we still have not gotten any data because of that tactic. Battelle is an albatross around our necks and so are you.

Preliminary data indicates that adult eagles have 50 times as much in their plasma than those eaglets. We could have gotten that data and more last summer if we were not stuck planning with Battelle. Don't you realize we have a plan. You continually ignore our plans and start new plans that slows the collection of data essential for our risk assessments. You slow our progress in understanding the extent of PFOS pollution and damage. For 20 years the division has been stalling the collection of data needed for evaluating the environmental impact of fluorochemicals.

PFOS is the most onerous pollutant since PCB and you want to avoid collecting data that indicates that it is probably worse. I am outrage.

# U.S. EPA'S RESPONSE TO PFAS

**2009.** EPA published provisional health advisories for PFOS and PFOA in drinking water (400 ppt PFOA + PFOS)

**2013-2015.** EPA included 6 PFAS in UCMR 3 testing requirements

**2016.** EPA replaced the 2009 provisional health advisories for PFOS and PFOA with new lifetime health advisories of 70 ppt, individually or combined

**2021.** EPA finalized UCMR 5, which will require sample collection for 29 PFAS between 2023 and 2025



# UCMR 3 2013-2015

Required monitoring for 30 unregulated contaminants, including PFOS, PFOA, PFNA, PFHxS, PFHpA, and PFBS, between 2013 and 2015.

Applied to all public water systems (PWSs) serving more than 10,000 people and 800 representative PWSs serving 10,000 or fewer people.

Minimum reporting levels for PFOS and PFOA were 40 ppt and 20 ppt, respectively.

According to the data collected through UCMR3, at least **6 million Americans** were exposed to drinking water impacted by PFOA or PFOS greater than 70 ppt.

Approx. 97% of PWSs in the US have not yet tested.

# UCMR 5 2023-2025

PWSs will collect samples for 29 PFAS and lithium, during a 12-month period from January 2023 through December 2025.

EPA has lowered the UCMR 5 minimum reporting levels for PFOS and PFOA down from what they were under UCMR 3.

New UCMR 5 minimum reporting levels for PFOS and PFOA are 4 ppt.

# EPA'S LATEST RESPONSE TO PFAS


The EPA in March, 2023, published its intent to create an MCL for six PFAS chemical at 4 ppt. One in effect, it will mandate compliance.

Previously, the EPA released four drinking water health advisories for PFAS. EPA issued interim, updated drinking water health advisories for PFOA and PFOS that replace those EPA issued in 2016. For the first time, EPA is issuing final health advisories for perfluorobutane sulfonic acid and its potassium salt (PFBS) and for hexafluoropropylene oxide (HFPO) dimer acid and its ammonium salt (“GenX” chemicals).

The new EPA health advisories are:

- PFOS - **0.02 ppt** (PARTS PER TRILLION)
- PFOA - **0.004 ppt**
- GenX - **10 ppt**
- PFBS - **2,000 ppt**

# RECOMMENDATIONS

1. Retain legal counsel
    - \* Legal Services Contract
    - \* contingency fee
    - \* no fees unless a recovery
    - \* all expenses are advanced by Baron & Budd
  2. Initiate a case in the MDL
  3. Begin establishing a damage model for both past and future costs
- 
- Several white lines of varying lengths and slopes are positioned in the bottom right corner of the slide, creating a modern, abstract graphic element.