Taft/

50 E. Rivercenter Blvd., Suite 850
Covington, KY 41011
Tel: 859.331.2838 | Fax: 513.381.6613
taftlaw.com

ROBERT A. BILOTT
859.547.4306
bilott@taftlaw.com

March 3, 2022

The Honorable Joseph R. Biden, Jr.
President of the United States
1600 Pennsylvania Ave., N.W.
Washington, D.C. 20500

Administrator Michael Regan
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460-000

Re: Nationwide PFAS "Forever Chemical" Contamination

Dear President Biden and Administrator Regan:

For over two decades, I have worked to raise awareness and understanding of the serious threat to public health and the environment posed by exposure to man-made per- and polyfluoroalkylated substances ("PFAS"), now known as "forever chemicals." Although my work in this regard has occurred while representing a variety of injured parties as a lawyer, I am not writing to you today on behalf of any client or law firm – but as a private citizen offering my assistance and support to help make sure that our Nation not only confronts this imminent threat to our health and environment based on what the science already confirms, but makes sure that those who actually caused this problem are the ones held responsible for damage they caused – not the American taxpayers.

There is now virtually uniform consensus among the scientific and regulatory communities that various PFAS chemicals present an imminent and substantial threat to public health and the environment. Unfortunately, it took far too long for this consensus to emerge, because so much of the science and information about what these chemicals are and how they impact our health and the environment was purposefully withheld and covered up by the PFAS manufacturers for decades. The general public has only recently begun to even learn of the existence of these chemicals and their impact as the story of how all of this happened has finally started to be revealed in films,

such as the documentary, "The Devil We Know" (released in 2018), the feature film "Dark Waters" (released in 2019), and the book, "Exposure" (also released in 2019). As more people became aware of the problem, we saw an incredible surge in legislation and regulation being proposed to address forever chemicals, not only nationwide (at both the federal and state levels), but internationally, as well. Hundreds of bills and proposed rules and regulations are now pending worldwide to try to attack the PFAS problem. But one critical aspect of the PFAS story tends to be overlooked in far too many of the proposed "fixes" to the PFAS problem: PFAS manufacturer accountability and responsibility.

It is critical to keep in mind when considering the PFAS problem that these are completely man-made toxins whose creation and release into our environment – and into all of us – was controlled by a small group of companies who not only knew that this contamination was occurring and would continue to occur, decades ago, but who profited enormously by intentionally covering up the problem. These are the same companies who now refuse to accept financial responsibility for the unprecedented damage they have caused and are even fighting those who dare to try to adopt laws or regulations to combat the problem they created.

It is true that the potential price tag to address this problem and clean up this mess is staggering, and thus the potential liabilities here are immense for these companies. After all, these chemicals have been manufactured and pumped out into our world for over 70 years and are now being found in drinking water, soil, air, plants, landfills, biosolids, livestock, food, and in countless consumer and industrial products - worldwide. But these companies have known since at least the 1970s that these same toxic chemicals were getting into human blood – including the blood of people all across this country - but did not tell us. And when outside scientists and regulators finally first started learning of the existence of these toxins in our blood in the late 1990s, the country's primary PFAS manufacturer did not disclose that the levels of PFOS being found in the general US population blood at the time (approximately 30 parts per billion ("ppb")) were approximately 30 times higher than what one of its own scientists had determined was a "safe" human blood level of 1.05 ppb. (*See e.g.* Ex. A.) Yet, to this day, the PFAS manufacturers deny any responsibility for any harm caused by the presence of their PFAS in the blood of virtually every man, woman, child – and even newborn baby – in this country (and possibly the entire world), arguing that they never had any scientific basis to believe that the levels found in our blood present any risk of harm. (*See e.g.* https://www.3m.com/3M/en_US/pfas-stewardship-us/health-science/ ("The weight of scientific evidence from decades of research does not show that PFOS or PFOA causes harm in people at current or past levels.").[1]

There should be no doubt who is responsible for contaminating the whole planet

[1] Accessed March 3, 2022.

and poisoning the blood of virtually every American with PFAS – and who has known (for decades) that the levels in our blood are not "safe." It is way beyond time for US EPA and our federal agencies and authorities charged with protecting human health and the environment to take comprehensive, meaningful action to stop this poisoning and to address this massive public health and environmental threat. It was, therefore, incredibly encouraging to see the recent announcements by US EPA that it would move forward with certain regulatory actions to address PFAS, and to see the urgent need to address the PFAS problem publicly acknowledged by the President in recent speeches and in recent funding allocations. But it is equally important that the costs for fixing the PFAS problem be borne by the proper parties. Taxpayers should not be told that they have to pay for cleaning up their own water, properties, or the impacts to their own bodies and families from these "forever chemicals." We already know which companies created these man-made toxins and spewed them into our world creating global contamination on an unprecedented scale – all for a profit. We should be holding them fully and solely responsible for all the damage and harm they created,[2] and not allowing the US taxpayers to "bail them out" in any way.

Please let me know if there is anything I can do to further assist any efforts to help raise awareness and understanding of the history of the PFAS problem in this Country or to identify and explore our options for moving forward. Thank you.

Very truly yours,

Robert A. Bilott

Encl. (Ex. A)

[2] The PFAS Accountability Act (introduced in Congress last April) is an example of a recent, pending effort to address proper allocation of responsibility and burdens for PFAS damages and injuries.

Estimation of "Safe" Reference Level (ppb) of PFOS in Plasma

Basic Factors:

- LOAEL in Rhesus Monkeys = 0.5 mg/kg/day over 90 days.
- PFOS is cumulative, the excretion kinetic being quite low (30.2% in urine and 12.6% in feces 89 days after an i.v. dose in rats [*rats may have significantly more urinary excretion capability than humans*]).
- Absorption from the G.I. tract is almost complete (>95%) within 24 hours after administration.
- Significant enterohepatic re-circulation occurs.

Safety Factors:

- 10 for LOAEL to NOAEL
- 10 for sub-chronic to chronic
- 100 for interspecies extrapolation
- 10 for exposure of children (Food Quality Safety Act & Water Act)

note bene:
I might be inclined to keep or reduce interspecies S.F. and increase LOAEL to NOAEL and/or subchronic to chronic.

Applying 100,000-fold safety factor to sub-chonic Rhesus study gives RfD of 5 nanograms/kg/day. For a 70 kg human, this is converted to 0.35 micrograms/day.

note bene:
Please recall that FDA uses 5.0 micrograms/day from all sources as a risk level for N-Ethyl FOSE. We can compare PFOS and N-Ethyl FOSE risk values stated here on a molar basis:

- *5.0 micrograms/day N-Ethyl FOSE = 8.5 nanomoles/day*
- *0.35 micrograms/day PFOS = 0.7 nanomoles/day*

Since our basis is a 90-day study in Rhesus monkeys, what is the estimated plasma level of PFOS associated with this RfD of 0.35 micrograms per day? I can only think to do this by multiplying 0.35 micrograms per day by 90 days to get a total dose of 31.5 micrograms. Of this, let's assume 10% is in plasma (may actually be a little less). So, 3.15 micrograms in plasma gives a concentration of 1.5 ppb, assuming that the average human has 3 liters of plasma (60% of blood volume, which is 5 liters in the normal human, assuming normal hematocrit of 40%).

Therefore, I derive with **1.05 ppb** as a reference level in plasma for chronic PFOS exposure from all sources.

While this may seem extreme, it follows the approach used by federal agencies. The safety factors used could be significantly reduced with the results of additional studies.