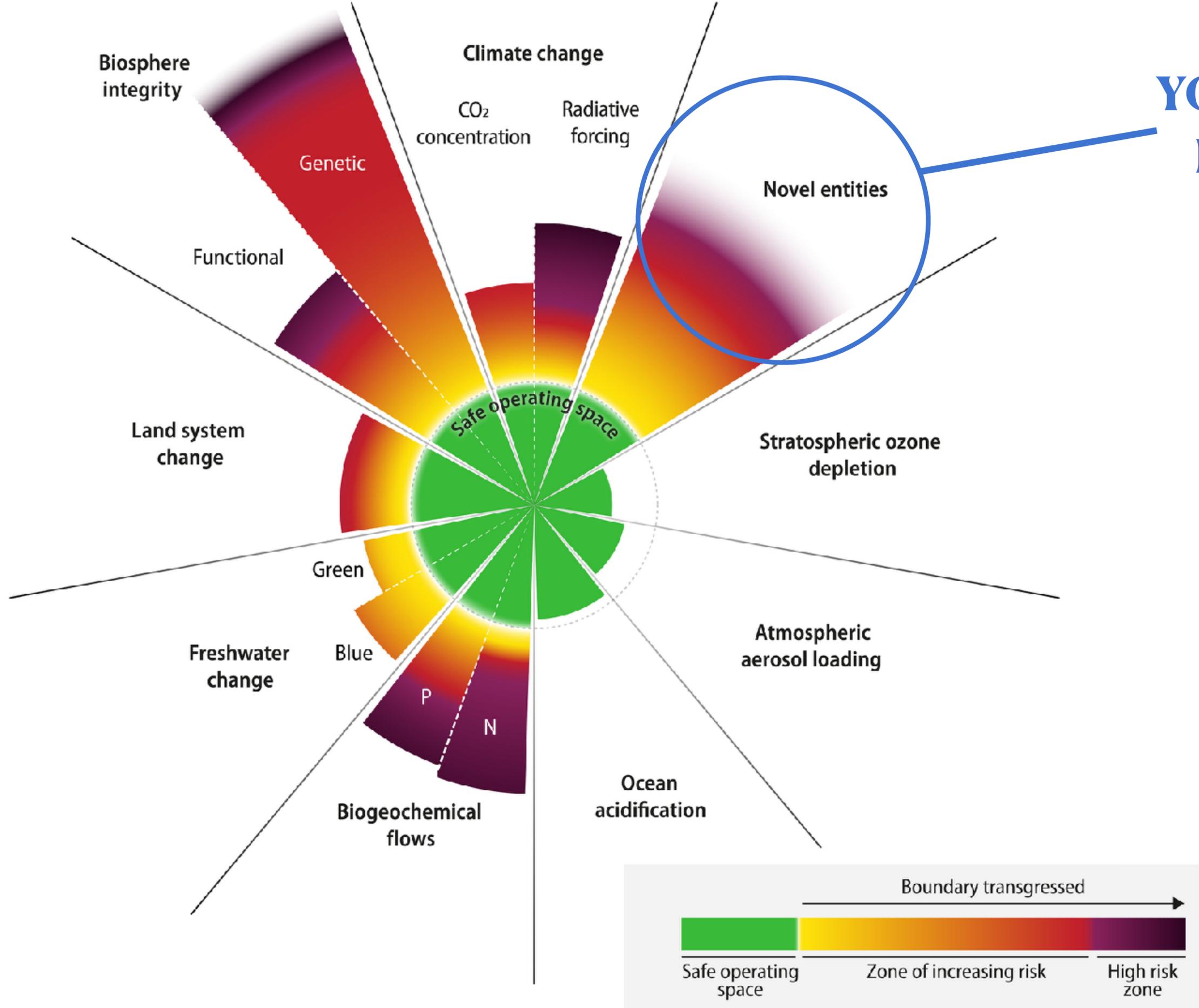


**Pollution is
good for the economy
- the PFAS case -**

thomas@goorden.be - Feb 10th 2024

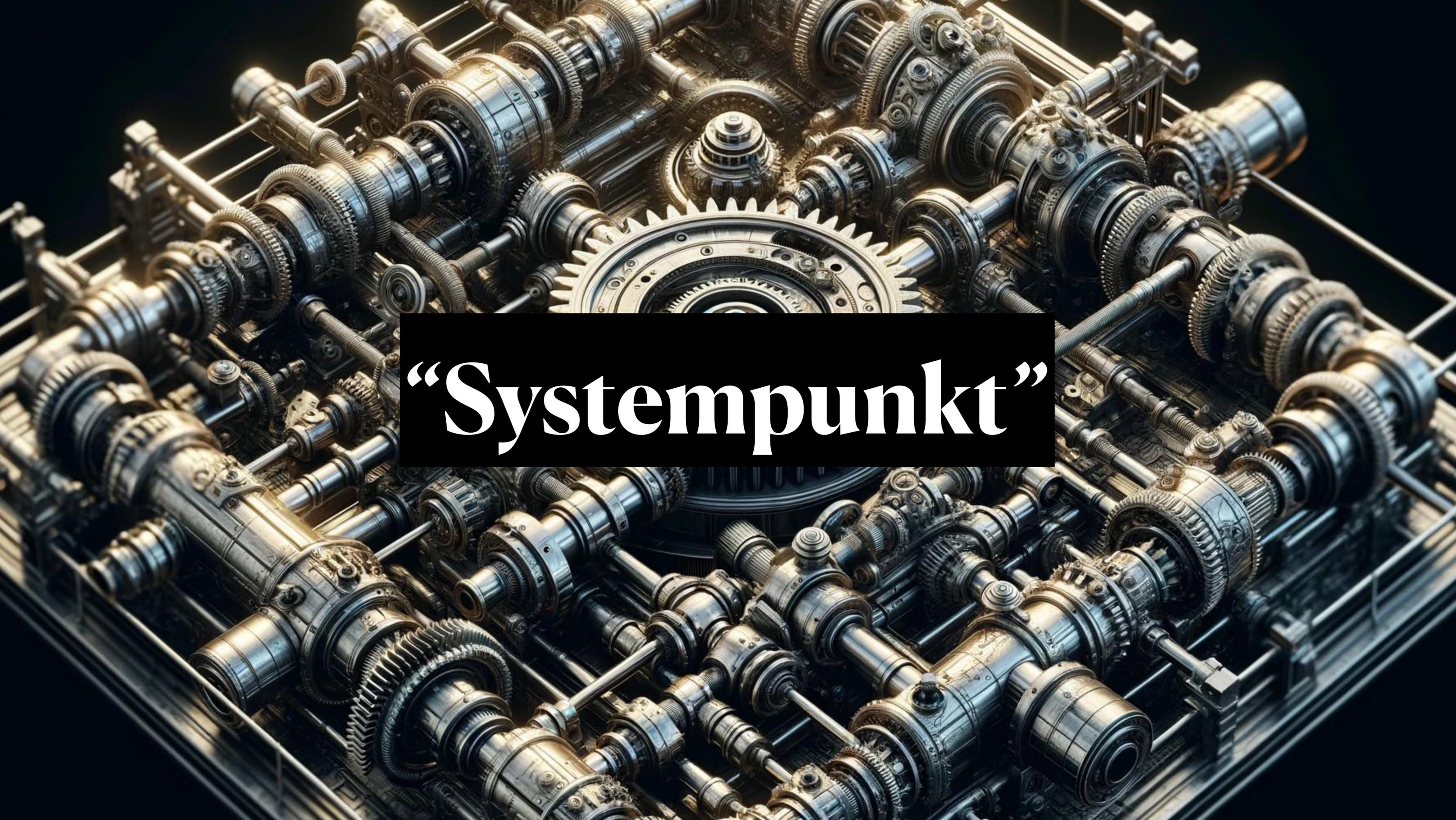




About me

- Background in physics
- Volunteer turned “civic lobbyist”
- (Researcher/CEO/writer/director/...)
- Whistle blower in Antwerp PFAS case
- (Air quality, plastic pollution)
- Has actual mask

**What's your
theory of change?**



“Systempunkt”

The System



THE WEINBERG GROUP INC.

April 29, 2003

Jane Brooks
Vice President, Special Initiatives
DuPont de Nemours & Company
Chestnut Run 708
4417 Lancaster Pike
Wilmington, DE 19805

Re: Perfluorooctanoic acid (PFOA)

The constant theme which permeates our recommendations on the issues faced by DuPont is that **DUPONT MUST SHAPE THE DEBATE AT ALL LEVELS.** We must implement a strategy at the outset which discourages governmental agencies, the plaintiff's bar, and misguided environmental groups from pursuing this matter any further than the current risk assessment contemplated by the Environmental Protection Agency (EPA) and the matter pending in West Virginia. We strive to end this now.

The outcome of this process will result in the preparation of a multifaceted plan to **take control of the ongoing risk assessment by the EPA, looming regulatory challenges, likely litigation, and almost certain medical monitoring hurdles.** The primary focus of this endeavor is to strive to create the climate and conditions that will obviate, or at the very least, minimize ongoing litigation and contemplated regulation relating to PFOA. This would include **facilitating the publication of papers and articles dispelling the alleged nexus between PFOA and teratogenicity** as well as other claimed harm. **We would also lay the foundation for creating Daubert precedent to discourage additional lawsuits.**

THE WEINBERG GROUP would also prepare an all-encompassing strategy to meet public relations issues and, if necessary, prepare company representatives for testifying before governmental bodies. These are but a few of the services we provide.

**“When people show you who they are,
believe them the first time” - Maya Angelou**

Bending Science

(McGarity and Wagner, 2008)

- Creating/distorting research
- Concealing unwelcome research
- Turning reliable research into “Junk”
- Bullying scientists who produce damaging research
- Assembling an expert group to advance a favoured outcome
- Manipulating public perceptions about credible science

Bending Science

... from theory to practice



Memo

(2018)

Grondwater als receptor

M.b.t. de receptor grondwater wordt voorgesteld om te baseren op WHO-methodiek waarbij een interventiewaarde voor grondwater kan worden afgeleid onder de uitgangspunten dat grondwater geschikt moet zijn voor menselijke consumptie zonder verdere zuivering ($C_{gw} = \% \text{ TDI} \times \text{lichaamsmassa/liter drinkwater per dag}$). Op basis van bovenstaande formule kan een concentratie worden berekend van $4,5 \mu\text{g/l}$ PFOS bij volgende aannames:

- Dagelijkse consumptie van 2 l per dag (voor een volwassene, cfr. WHO);
- TDI van 150 ng/kg lg/dag (cfr. EFSA 2008). 100 % opvulling van TDI door drinkwater.
- Lichaamsgewicht van 70 kg (cfr. WHO)

$$\frac{0.15 \mu\text{g/kg} \times 70 \text{ kg}}{2 \text{ L}} = ? \quad (\text{the multimillion € equation})$$

Everybody's doing it!

Table S 3: The calculated SRV for groundwater (ng/l) for PFOS and PFOA

Toxicological reference value	Value	Unit	SRV groundwater (ng/l)	
			PFOS	PFOA
Set 1 (preference) US-EPA (2016a)				
TDI oral	$2 \cdot 10^{-5}$	mg/kg/d	120	120
TCA inhalation	$7 \cdot 10^{-5}$	mg/m ³		
TDI dermal	$2 \cdot 10^{-5}$	mg/kg/d		
Set 2 Zeilmaker <i>et al.</i> (2018)				
TDI oral	$6.25 \cdot 10^{-6}$	mg/kg/d	38	75
TCA inhalation	$21.9 \cdot 10^{-6}$	mg/m ³		
TDI dermal	$6.25 \cdot 10^{-6}$	mg/kg/d		
Set 3 EFSA (2018b)				
TDI oral	$1.8 \cdot 10^{-6}$	mg/kg/d	11	4.8
TCA inhalation	$6.3 \cdot 10^{-6}$	mg/m ³		
TDI dermal	$1.8 \cdot 10^{-6}$	mg/kg/d		



(2020)

The Inconvenient Truth...

	TDI or RfD (ng/kg/day)	BW: 60 kg		BW: 70 kg
Contribution		20%	100%	20%
EFSA 2008	150	900	4500	1050
EPA 2016	20	120	600	140
EFSA 2020	0,63	3,8	18,9	4,4
EPA draft 2021	0,001	0,005	0,0237	0,006

Is this a problem?



“Researchers take into account the state-of-the-art in relevant fields when developing research ideas.”

... not really



Plus:

- No parliamentary oversight
- No ALLEA enforcing mechanism
- Continuous pressure against access to information (Aarhus)

Just the tip of the

more PFAS nastiness

- Hidden deal between 3M and the Flemish gov
- Illegal dump sites disguised in “landscaping” permits
- Multiple unenforced emission norms
- GHG emissions off by a factor 2x
- Hidden analytical techniques (!)
- Ultrashort PFAS coverup
- Hidden “PFAS soup”
- Manipulated food and water norms (!)

Strategies & techniques

(that worked at least once)

Writing, calculating, coding



Thomas Goorden

4.2K friends



+ dozens of ("expert") reports, columns, a book, ...

a lot of help from “friends”



I ❤️ the Council of State



(... and RvVB)

Skills

How to survive

What is Batman's
real superpower?

... and a side-kick



Chaos Magick

Changing (the perception of) reality



Science!

(For five minutes.)

Results!

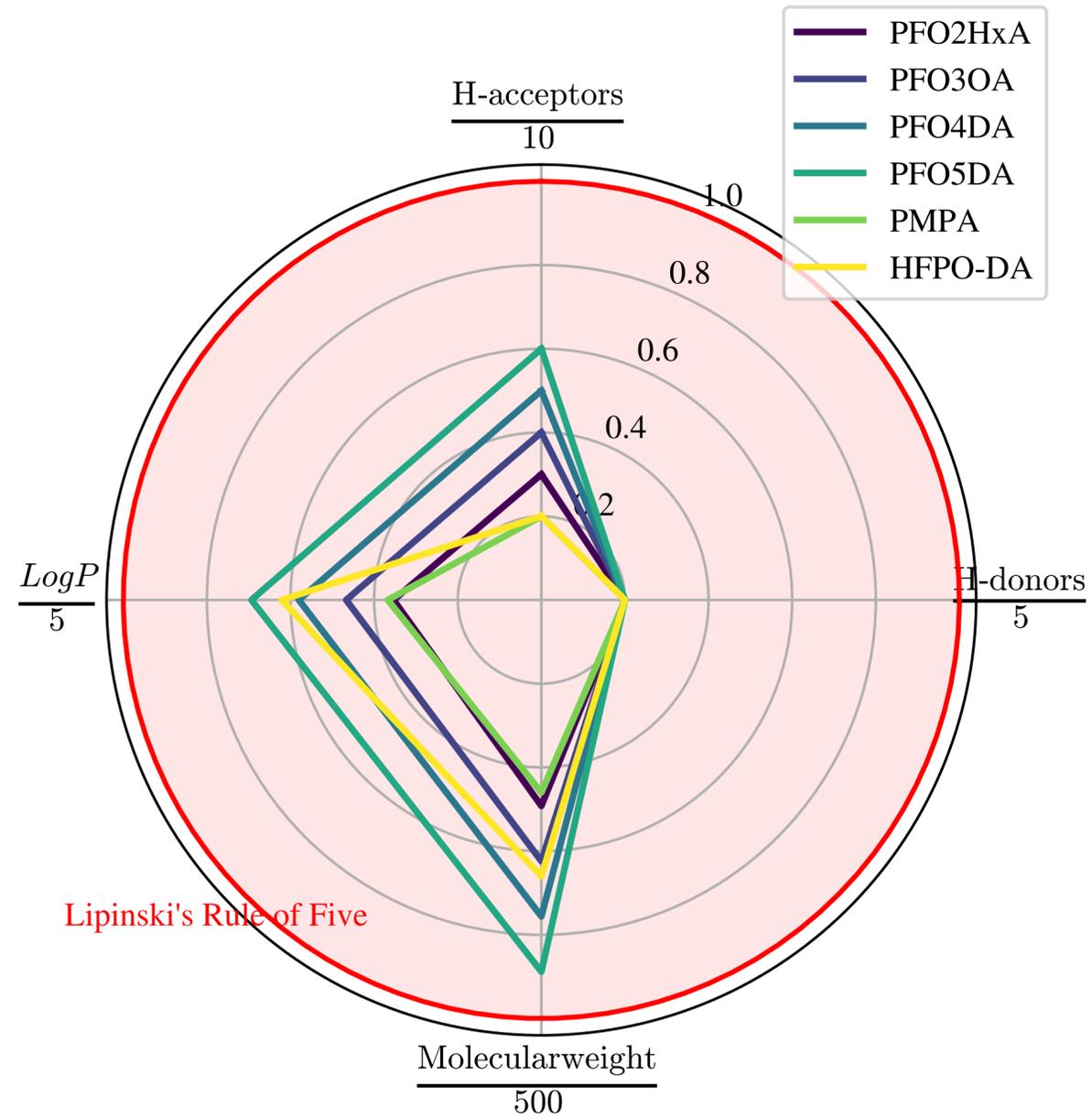
- 3M quit making PFAS, everywhere, forever
- Chemours and Solvay nearly there?
- Multiple illegal dump sites halted
- Lawsuits everywhere! #winning
- - 1,78 Mton CO₂-equivalent (and counting)

What's next?

~~**“harmless until proven otherwise”**~~

Reversing the Burden of Proof

Lipinski's "Rule of Five"



“High - Class III” Cramer classification

Class III substances are those that permit no strong initial presumptions of safety, or that may even suggest significant toxicity. They thus deserve the highest priority for investigation. Particularly when per capita intake is high or a significant subsection of the population has a high intake, the implied hazard would then require the most extensive evidence for safety-in-use.

= all PFAS!

The true cost of (in)dependence?

OPBRENGSTEN 2022

Financiering referentietaken

12 582 kEUR

Bedrijfsopbrengsten

90 704 kEUR

Toelagen

57 681 kEUR

Activering O&O

76 300 kEUR



VS

📅 ESTIMATED ANNUAL BUDGET

€25,159.82 EUR

TOTAAL

237 267 kEUR

(=0,014 € per ton CO₂/y)

Misalignment

Pollution is good for the economy!

Cure	↔	Prevention
“Jobs”	↔	Life
Funding	↔	Integrity
Connections	↔	Reporting
Government	↔	Law
Nudging numbers	↔	Fixing problems
Next election	↔	Next decades



3M



Vlaamse
overheid