

# 3M PFAS case Belgium

Overview and ongoing actions

# 3M case Belgium timeline

- ▶ 1970s: 3M starts PFOS production at the Zwijndrecht site
- ▶ 2001: production of PFOS is stopped
- ▶ 2004: study on wood mice around the 3M site indicate high PFOS exposure (Hoff et al. 2004)
- ▶ 2017: Soil study for big infrastructure works indicates high values of PFOS in Zwijndrecht soil
- ▶ 2017: study on bird eggs finds highest concentrations of PFAS ever measured in eggs (Groffen et al. (2017))
- ▶ May 2021: citizen alerts the media on PFOS pollution and potential spreading of pollution due to start of infrastructure works



# Follow-up after media attention

- ▶ Creation of a Flemish PFAS working group tasked to:
  - ▶ Map the current pollution problem at Zwijndrecht and develop so called “no regret” measures
  - ▶ Take blood samples of citizens living close to the 3M plant to assess exposure
  - ▶ Map and identify other potential PFAS pollution sites in Flanders
  - ▶ Produce a report and come with policy recommendations

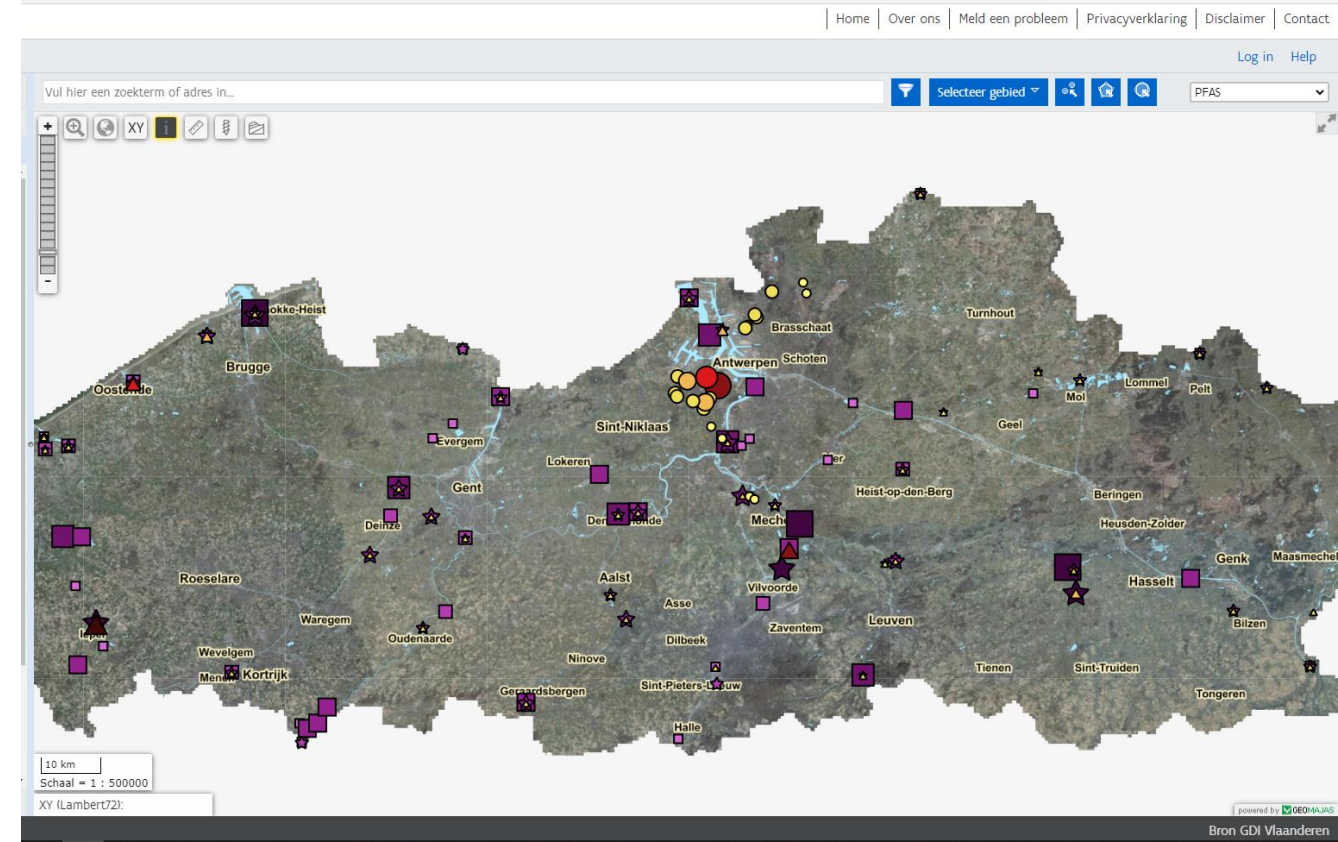




# First results

- ▶ First “Interim” report has been published in September 2021
  - ▶ Multiple PFAS hotspots have been identified in Flanders
  - ▶ “No regret” measures have already been communicated for those sites (no consumption of home-grown vegetables and eggs for example)
- ▶ October 2021: first results of PFAS in blood samples:
  - ▶ On average higher concentrations of PFOS and PFHxS compared to other (EU) reference populations
  - ▶ 92,7% of samples exceeded the EFSA guideline of 6,9 ng/L
  - ▶ For PFOS: more than half exceeded the HBM-II value (20 µg/L for general population; 10 µg/L for pregnant women)

[PFAS \(vlaanderen.be\)](https://pfas.vlaanderen.be)



# Upcoming

- ▶ Zwijndrecht blood sampling will be extended to 5km radius
  - ▶ Up to 7000 samples will be taken
- ▶ Several other studies are in the pipeline:
  - ▶ Drinking water
  - ▶ Food
  - ▶ Air deposition
  - ▶ Compost
  - ▶ ...
- ▶ Final report of the WG is expected by June 2022
  - ▶ Will include policy recommendations
- ▶ Federal PFAS working group
  - ▶ Bundle information and data being generated by different BE authorities
  - ▶ In order to share data with EU colleagues to assist the development of regulatory actions on EU and international level



## Aanpak PFAS-problematiek

Eerste tussentijds rapport van de opdrachtgever aangesteld door de Vlaamse Regering // september 2021

# References and further info

- ▶ Hoff et al. (2004) Biochemical effect evaluation of perfluorooctane sulfonic acid-contaminated wood mice (*Adopemus sylvaicus*). <https://doi.org/10.1289/ehp.6479>
- ▶ Groffen et al. (2017) Perfluoroalkylated acids in the eggs of great tits (*Parus major*) near a fluorochemical plant in Flanders, Belgium. <https://doi.org/10.1016/j.envpol.2017.05.007>
- ▶ <https://www.vlaanderen.be/pfas-vervuiling>
- ▶ <https://www.zorg-en-gezondheid.be/bloedonderzoek-toont-hoge-waarden-van-pfos-bij-meer-dan-de-helft-van-de-deelnemers-%E2%80%93-no>
- ▶ <https://www.vlaamsparlement.be/nl/parlementair-werk/plenaire-vergadering-en-commissies/commissies/onderzoekscommissie-pfas-pfos>
- ▶ <https://www.vlaanderen.be/en/pfas-in-flanders>
- ▶ <https://www.vlaanderen.be/publicaties/personal-summary-of-the-first-interim-report-on-the-pfas-contamination>

# Thank you for your attention

Any questions?