Endocrine disruptor levels in invertebrates from the Scheldt Estuary: cause for concern?

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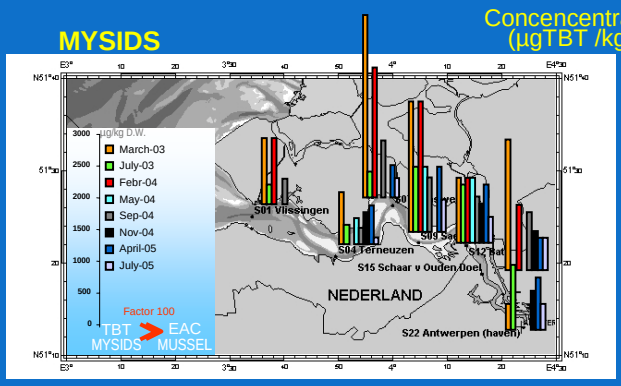
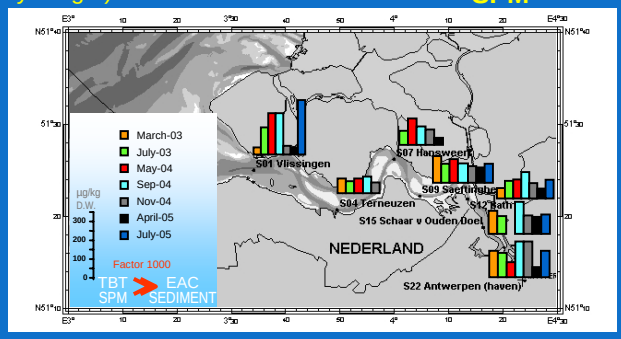
Introduction and Abstract

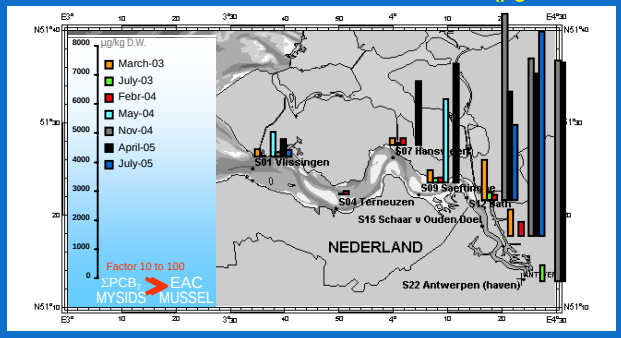
- **Chemicals with a known or potential endocrine disruption capacity were measured from 2003 to 2005 in different matrices (water, sediment, suspended particulate matter (SPM) and biota of the Western Scheldt Estuary**
- **Mysid shrimp were used for laboratory testing and an in-field indicator organism of accumulation and effects**
- **It is concluded that a large number of pollutants (1) accumulate in the environment and biota, and (2) that the concentrations observed in various environmental compartments are often higher than the Ecotoxicological Assessment Criteria (EAC) indicating a concern for the organisms living in that compartment.**

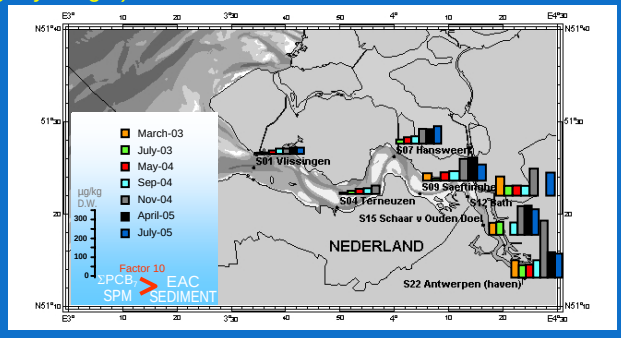
Concencentration tributyltin (µgTBT /kg dry weight)



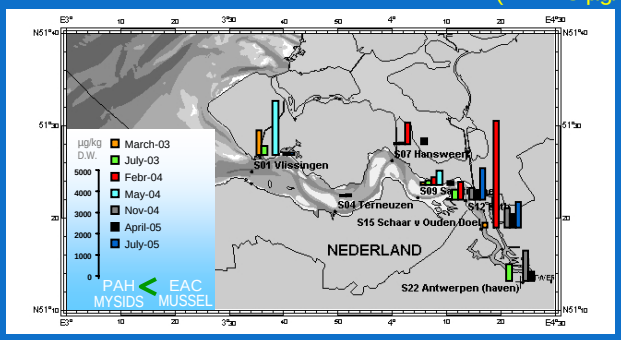


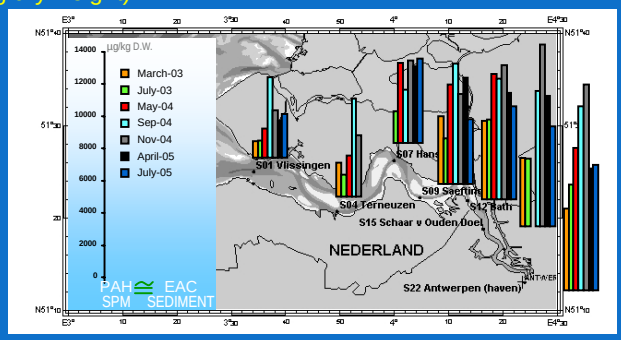
Concentration polychlorinated biphenyls (µgΣPCB7 /kg dry weight)





Concentration polyaromatic hydrocarbons (ΣPAHs µg/kg dry weight)





CONCLUSION

- **Mysid shrimp collected in the Western Scheldt exhibited high body burdens of TBT and PCBs**
- **For the compounds the 'environmentally safe concentrations' (represented by the EACs) are often exceeded indicating that the organisms living in this system might be adversely affected**

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