

PCB in French rivers

situation, analysis, plan

Jean-luc.perrin@developpement-durable.gouv.Fr

Analysis of the situation in autumn 2007

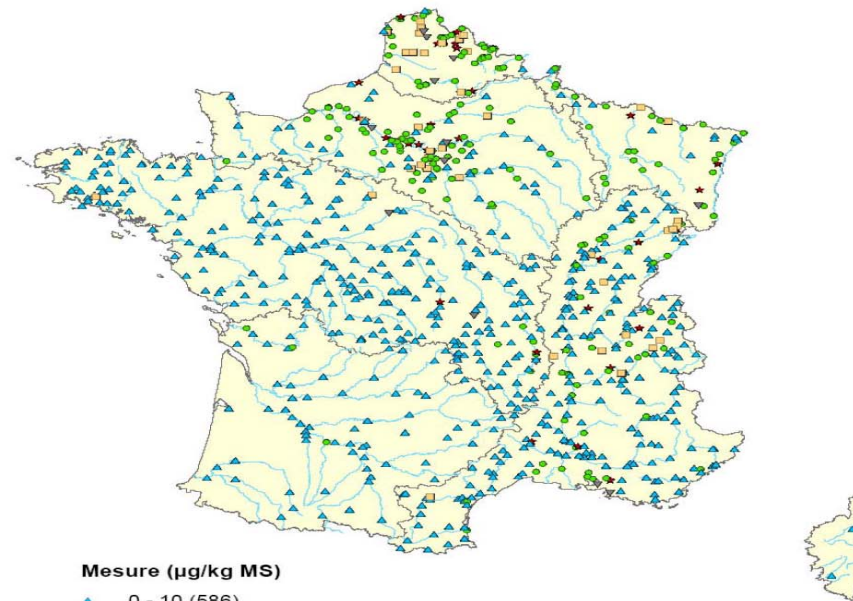
- Not far away in time from the ICCL of Stockholm
- change in norms for PCB contents of ailments changed the situation : what was considered as non polluted was then polluted
- publication of the map of contamination of sediments in rivers (july 2007)
- building of an action plan
- > importance of benchmarking and international experience (thanks Dominique and you all !)

The situation in july 2007



Contamination des sédiments fluviaux et estuariens par les PCB

Données BNDE 2000-2005



Mesure ($\mu\text{g}/\text{kg MS}$)

- ▲ 0 - 10 (586)
- 11 - 140 (179)
- 141 - 270 (41)
- ▼ 271 - 400 (15)
- ★ > 401 (31)

— Principaux cours d'eau

Direction de l'eau - Juillet 2007
Source : BD Carthage®, Agences de l'eau



RÉPUBLIQUE FRANÇAISE



ICCL meeting Helsinki 16th september 2009

DGPR/SRT/SDRCP/JLP

benchmarking in pollution in the world

- what type of pollution encountered (widespread, concentrated, origin) : (cf BRGM report you were involved in)
- Available technics adopted and time of treatment
 - Water
 - Sediments
 - Destruction of PCB
- Examples around the world
 - Canada : Canal Lachine, Sydney Tar Pound
 - US : Duwamish River, Fox River, Hudson River, Housatonic River, Saginaw, Saint Laurent (NY)
 - Sweden : Lake Jarnjson, Fjord Orserumsviken
- > conclusions :
 - PCB can accumulate in sediments
 - This is the case in most industrialised countries
 - Different aspects of management : product policy, elimination of existing products, sanitary or ailment surveillance
 - No universal response for remediation : depends on the context (physical, socio-economical, and so on)

Parliamentary report on PCB in Rhone River I

- Philippe Meunier, MP of the Rhône Region issued a report
- Main proposals :
 - Take advantage of the european experience in searching PCB in food.
 - **Sanitary area**
 - Inform people about PCB contamination and issue consumption recommendation
 - Define a protocol for impregnation study
 - Put in place a follow of former worker of the PCB industry
 - Have an attention to irrigation water and drinking water alimentation
 - **Environment area**
 - Study (benchmark) the possibilities of digging sediments in rivers
 - Have a comprehensive investigation of the trophic chain in case of contamination

Parliamentary report on PCB in Rhone River II

- **Research area**
- Look for common work between different institutions on this subject
- Look as well on estuary areas (p. 93)
- Have a study on impregnation of different species
- Assess with certainty the non transmission of PCB to plants
- Study synergies with PCB and other pollutants in pollution
- **Fishing area**
- ... major social problem for France
- **Elimination of PCB**
- Renew the inventory of PCB containing objects
- Review the elimination plan
- Ensure that eliminating PCB will not create toxic subproducts...

French action plan for PCB pollution

- Sanitary part :
 - Study on contamination of population is in progress
- Environmental part
 - Axe 1 : intensify reduction of release of PCB :
 - Follow up of the elimination plan, in particular with power transformers
 - Information of people having objects with PCB : communication campaign
 - Axe 2 : improve knowledge
 - Expert group with national office for water and aquatic areas (ONEMA), and french reference offices (BRGM, CEMAGREF, INERIS IFREMER and industrial structures involved in remediation etc)

French action plan for PCB II

- **Axe 3 : reinforce controls on fish for human consumption**
 - Put in place a second phase of the sample plan (sediments and fishes) this autumn
- **Axe 4 : get knowledge about human contamination**
 - Impregnation study of french sanitary agency begins
- **Axe 5 : relocation of fishers**
 - Here is the tough problem of conflict of use...