



Policy for soil contamination in France

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- Summary of 15 years of soil policy
- actions for the next years



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What has been done since 1993

1. Knowledge about potentially polluted soils
2. Keeping memory of past
3. Knowing and assessing before acting
4. Risk based assessment
5. Inform public about actions undertaken
6. Action of State for orphan sites

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Locating potentially contaminated sites

- A bit of experience since 1993
 - Recover the knowledge of past (factories and services)
 - Keeping memory for the future
 - Collectively : data base for former industrial sites and sites that are under surveillance
 - individually : keeping the link with uses compatible with the state of environment

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Keeping memory of past activities

- Data base : basias
 - content : sites on which an potentially polluting activity has taken place
 - 180 000 sites
 - Achieved in 2008
 - 21 M€ today

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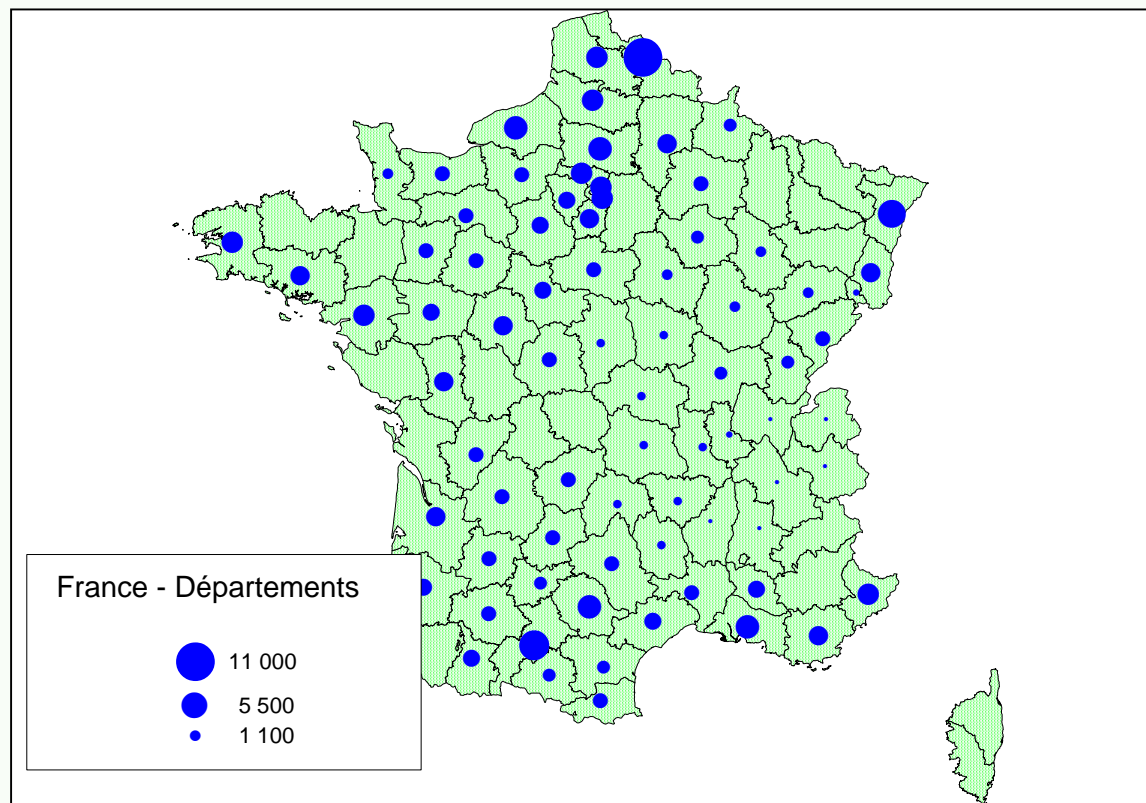
Basias sites

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Knowing and assess before acting

- An inventory does not indicate priority
- The goal is to ensure a high level of protection of environment and people
- Have a good knowledge of the state of environment, of the use to be able to evaluate risks

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Risk based management

- Take into account state of environment and use to be able to evaluate risks
- Does not exempt to look after pollution and remove it if it is possible
- Use and state of environment must be compatible

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Inform public

- **BASOL :**
 - 3900 sites on which an action is order by the authority (survey or remediation)
 - 2400 sites have undergone treatment but can be subject to restriction in use

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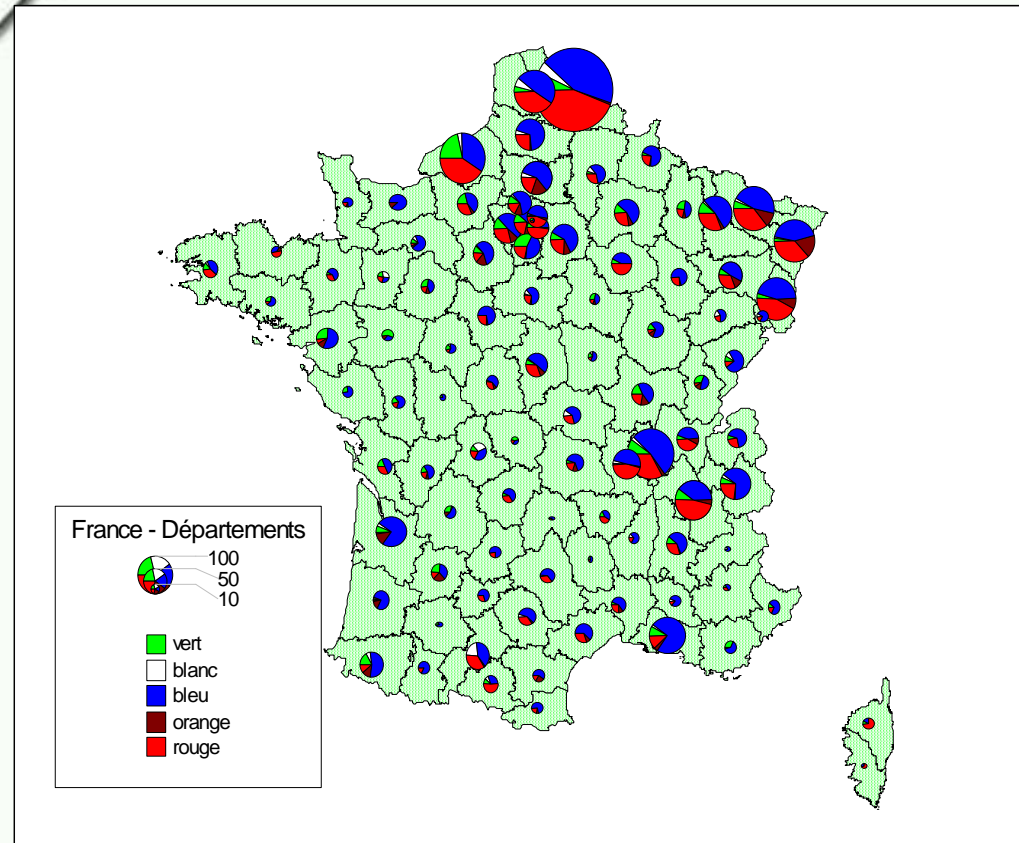


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Blanc : site mis en sécurité
ou devant faire l'objet de
diagnostics

Rouge : site en cours
d'évaluation

Orange : site en cours de
travaux

Bleu : site traité avec
surveillance et/ou
restriction d'usage

Vert : site traité et libre de
toute restriction



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State action for orphan sites

- A common goal : put sites in a state that does not harm environment or people outside
- ADEME work
 - About 50 actions in progress
 - 10 to 15 new actions each year
 - 10 M€ per year

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Work for the next years

1. Coming into practice of new texts
 - A common tool : the “conceptual diagram” : sources, medium and targets
 - Management measures
 - Site remediation
2. Reinforce prevention
 - Reduce toxic emissions
 - Act on lead intoxication for kids
3. Facilitate the actions of other actors than administration
4. Initiate a dynamic process of use of former polluted sites

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Coming into practice of new texts

- Take advantage of experience and promote best practices
 - Presentation to stakeholders of the project of texts and tools
 - Consultation on internet of the project of texts
- Real time follow up by a special expert committee

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Coming into practice of new texts

- Two steps in management
 - Knowing and understanding : the “conceptual diagram”
 - When required undertake actions (simple measures or management plan).
- Two ways to act
 - Uses are fixed : assess compatibility between state of environment and uses
 - Remediate a site : elaborate a management plan

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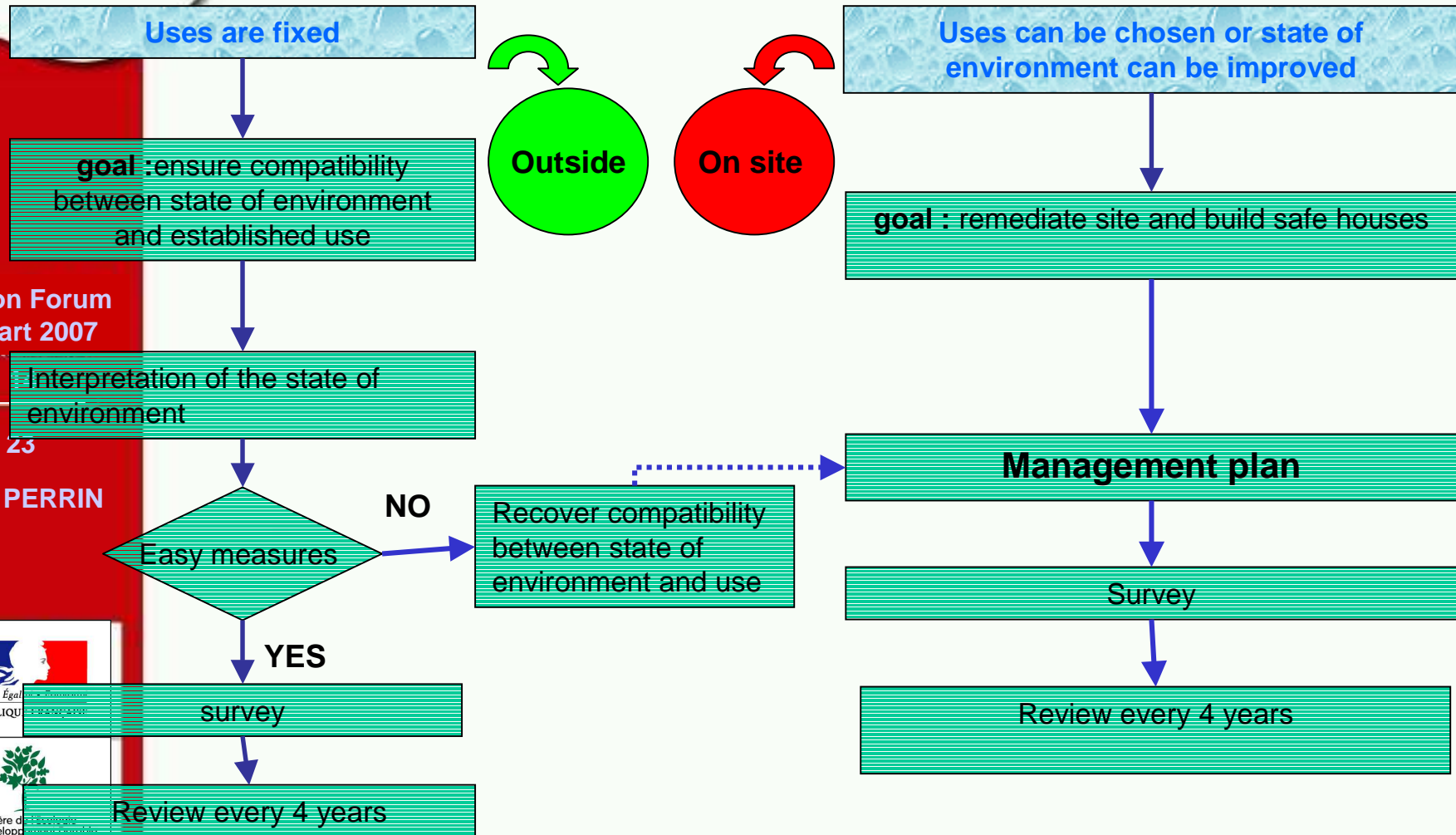
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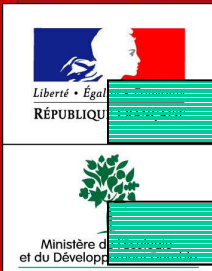
Polluted soils management



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What are the different texts published

- Methodological guide
 - Review of the state of the art
- Instruction for “classified installations for protection of the environment”
 - Prevent pollution – how to deal with polluted sites
- Available in french on www.sitespollues.ecologie.gouv.fr

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What is the “conceptual diagram” ?

- A snapshot of the situation :
 - Search and identify pollution sources
 - Assess the extend of pollution
 - Know how pollution diffuses and contaminates
 - Identify people who can be harmed and natural resources to protect
- Measurement must be the first choice to assess pollution, computing is the second choice option

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Management measures

- First try to evaluate if simple measures can solve the problem
- If not, a management plan is required
- If needed, protection measures for people must be adopted, in relation with sanitary authorities

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Site remediation

- Identify different remediation methods with their performances
- Identify corresponding costs
- Take a decision with respect to these criteria
- Choose the solution that respects the common values for sanitary management

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Remediation cost benefit balance

- Get the best level of protection,
 - Human and nature,
 - At a reasonable cost,
 - Keep in mind proportionality
- At comparable cost benefit balance choose solutions that
 - Suppress pollution sources.
 - At least keeps people away from pollution

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Facilitate intervention of other stakeholders

- Global frame with reinforced coherence
- Specify intervention of State in building authorization
- Facilitate instauration of “public interest servitude”
- Data base on soil quality
- Label study services

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Initiate a dynamic for reuse of polluted soils

- Sustainable management of space
- Pressure already high on reuse of former industrialized sites
 - Study group with ADEME/BRGM, local community to determine how to best conduct reuse

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Where to find informations

- www.ecologie.gouv.fr/-Sites-et-sol-pollues-.html
- www.sitespollues.ecologie.gouv.fr
- www.basol.ecologie.gouv.fr et <http://basias.brgm.fr>
- www.ademe.fr
- www.andra.fr
- www.brgm.fr
- www.ineris.fr
- www.irsn.fr

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