



HAL
open science

The “ red mud ” dispute: what role for the interdisciplinary approach of the OHM “ Bassin Minier de Provence ” ?

Y. Noack

► **To cite this version:**

Y. Noack. The “ red mud ” dispute: what role for the interdisciplinary approach of the OHM “ Bassin Minier de Provence ” ?. International Symposium of LabEx DRIIHM - 2019, Oct 2019, Lyon, France. hal-02314512

HAL Id: hal-02314512

<https://hal.science/hal-02314512v1>

Submitted on 12 Oct 2019

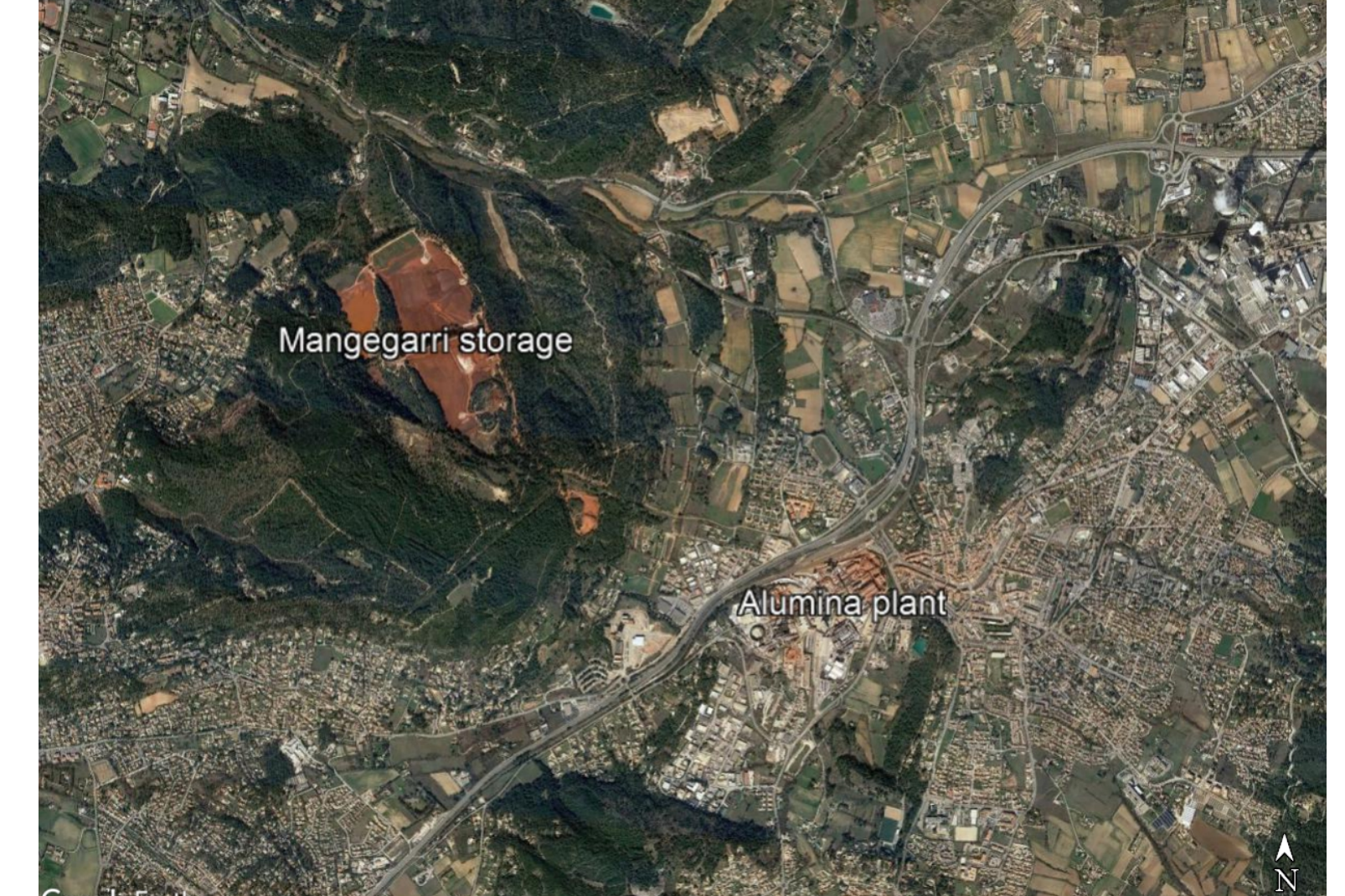
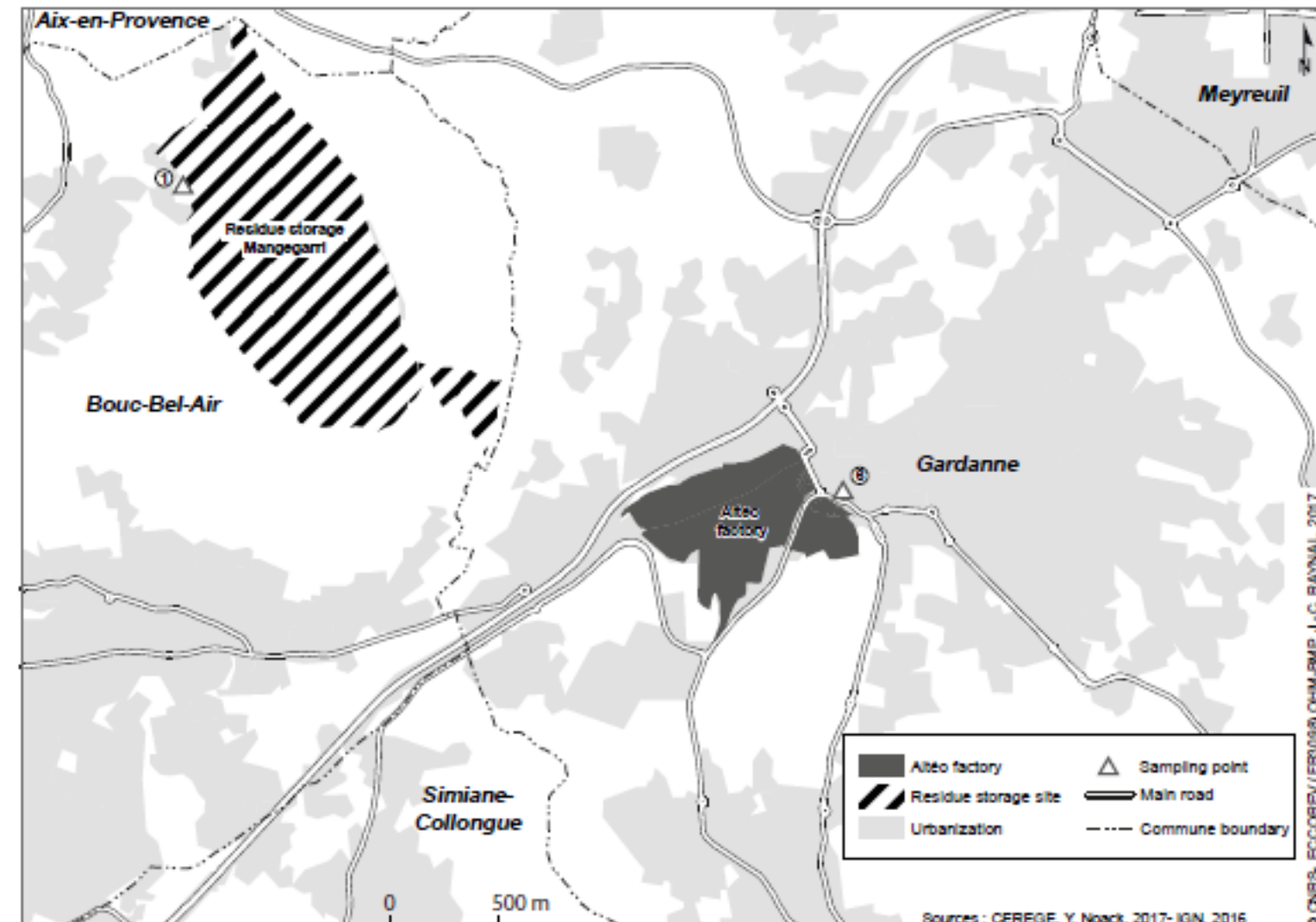
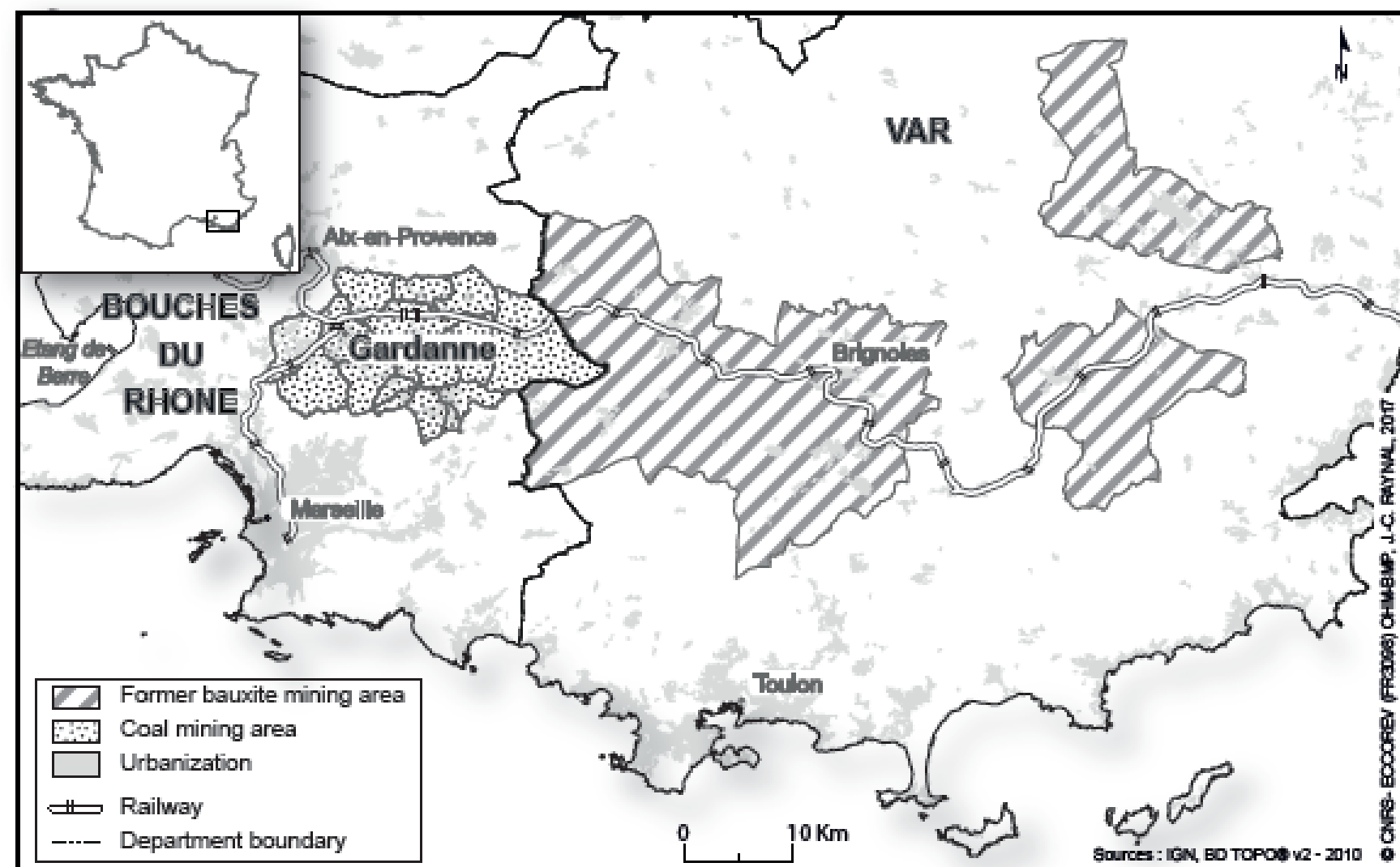
HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

The « red mud » dispute: what role for the interdisciplinary approach of the OHM « Bassin Minier de Provence » ?



NOACK Yves, Aix-Marseille University, CNRS, IRD, INRA, Collège de France, CEREGE, Aix-en-Provence, France



Situation of « Bassin Minier de Provence », Gardanne alumina plant and Mangegarri storage

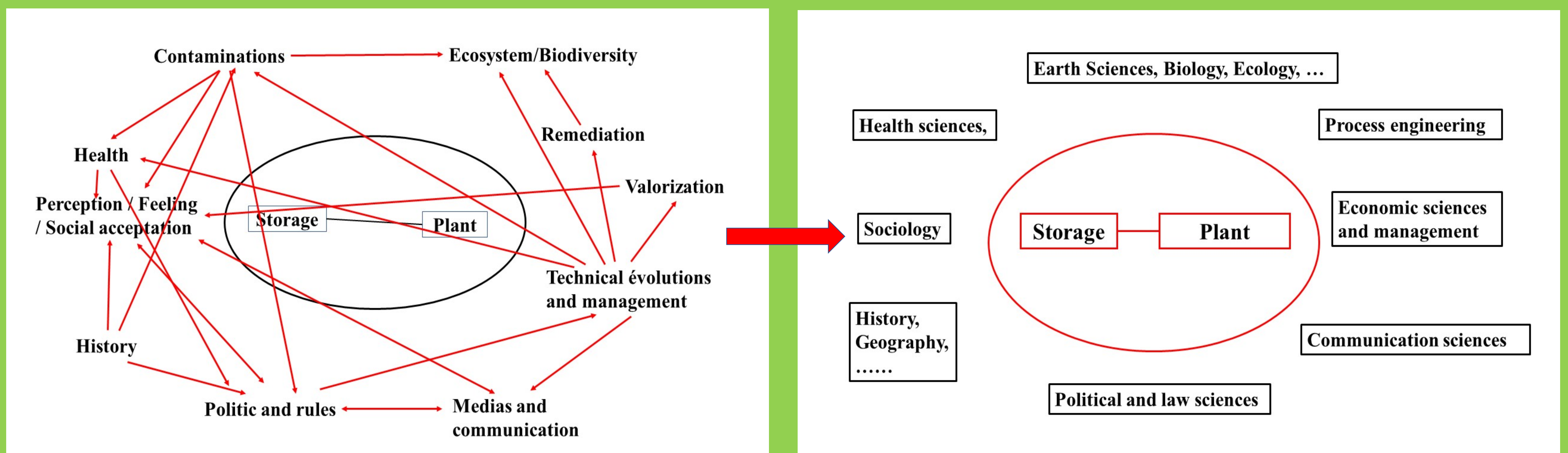
Bayer process : chemical attack of bauxite with soda at high temperature and pressure
 Production of alumina and bauxite residues (actually approximately 450 kg of residues for 1 t of bauxite)
 Chemical composition of bauxite residues : 50 % Fe oxides, 15 % Al oxides, 10 % Ti oxides, pH in water : 11-12
 Since 2016, after 50 years of sea dumping, residues are treated by filter press in order to obtain, on the one hand, a solid residue with a low caustic soda content, stored in Mangegarri site and, on the other hand, a liquid without suspended solids but with a high pH content and high content of some dissolved elements

The dispute concerns the composition and the toxicity of the liquid effluent and of the dust generated by wind around the storage site.
 But, generally, no scientific data are presented

The « Commission de suivi de site » (CSS) :
 Forum for information and concertation, without decision power, with five colleges : Administrations, Local authorities, Industrial, Employees, Neighbours and associations. No scientist is a member.

After 2 years, at the request of the associations, the OHM BMP has been accepted as a permanent member.

From 2010, with an interdisciplinary approach, OHM BMP had supported near 20 research projects about contamination, remediation, valorisation and social acceptance.



In 2015, OHM BMP had produced the first data on the atmospheric contamination around the storage site.

The results obtained by the OHM BMP are in agreement with those obtained since then from the various referrals to the Ministry of Ecology

Paradoxically, while the results obtained rather justify the arguments of the industrialist and the state, it is the associations that have the most confidence in the OHM's work.

What role for an OHM in an environmental conflict ? :

- Only an observer ?
- Should we let everything and its opposite be said, or should we contribute to more serene and effective debates, based on the most objective data possible?
- How be known, recognized by the actors of the conflict?
- How to avoid the instrumentalization by one or other of the parties?

