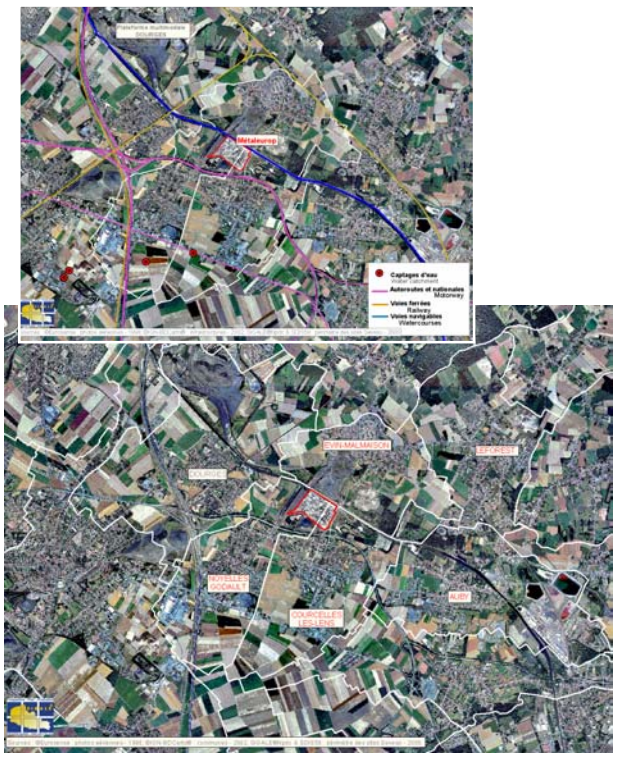
Megasite Métaleurop Nord

Introduction

The “Métaleurop Nord” (MéN) plant, set up in 1894, produced lead and zinc using initial melt heat processes. This site was the only producer of primary lead in France.

Megasite description

The site, situated along the Dêule canal, 12 km from Douai, is 38 hectares located in the communes of Noyelles-Godault and Courcelles les Lens.The plant, for over a century the source of considerable amounts of lead, cadmium and zinc waste, caused soil pollution on a dramatic scale. Métaleurop S.A. announced on January 16, 2003, its decision to withdraw its support from its subsidiary Métaleurop Nord located at Noyelles-Godault and employing 830 staff (causing bankrupcy). This social crisis is causing economic difficulties which are extending, through a “domino effect”, to the subcontracting firms.The company’s assets are very far from adequate to meet the social and environmental liabilities.



Contamination and measures

Contamination

- *Impact on air:* In 2001, the site disposed of 18.3 tonnes of channelled lead, to which have to be added around 10 to 15 tonnes of diffuse effluent – 0.8 tonnes of cadmium, 26 tonnes of zinc and 6,800 tonnes of sulphur dioxide.
- *Impact on surface water:* The water quality of the Haute-Deûle canal (discharge of effluent) is in class 3 (3 means bad quality).
- *Impact on soil:* The heavy metals remain on the whole confined to the upper soil levels (0-40 cm), except for zinc which may migrate deeper.

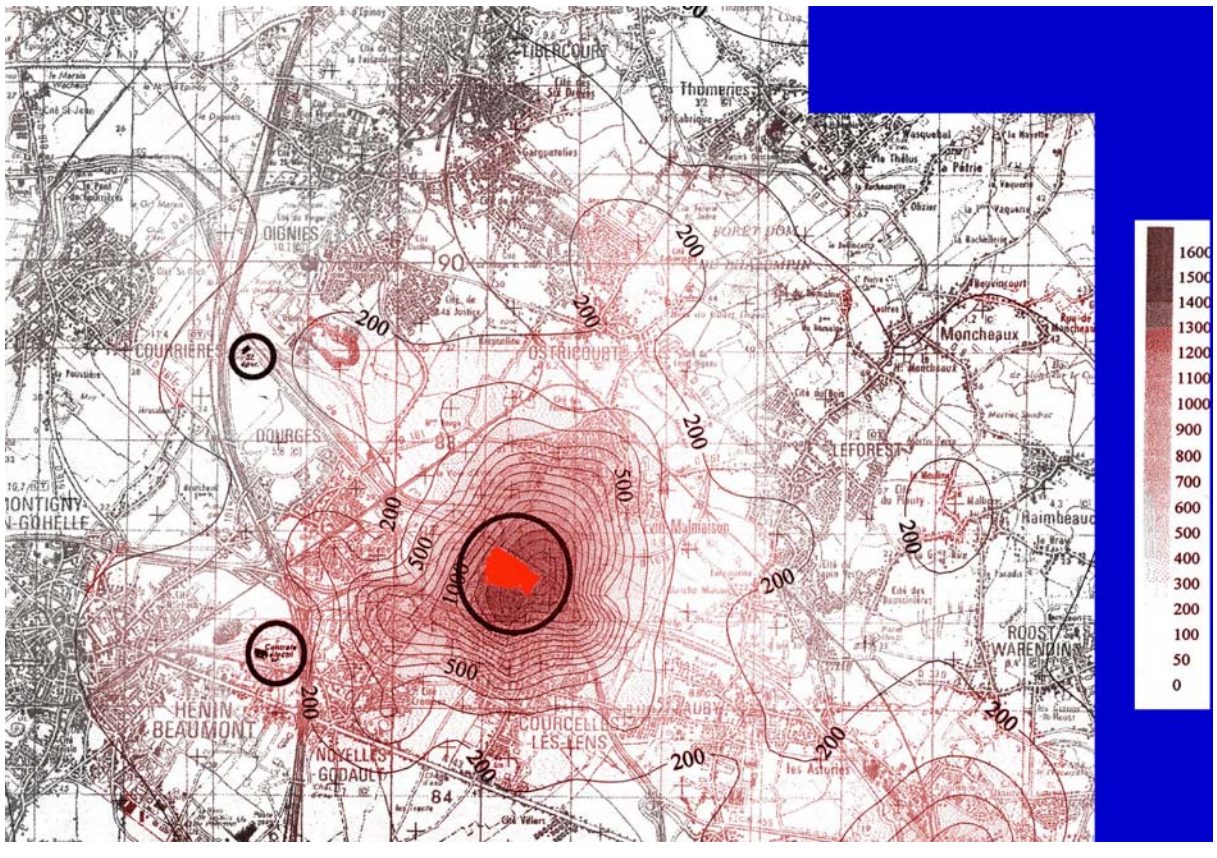
- *Impact on agricultural production:* impact on level of contaminants in crops and animal products for animal and human consumption.
- *Health monitoring of residents:* Increase in the blood levels (lead) linked to the distance of Metaleurop plant (not taken into account: garden crops, effect of drinking water).
- *Monitoring of workers*.

Measures for contaminated zones

A statutory tool ordering constraints regarding the use of the land:

1. > *1000 ppm zone* (255 hectares): large constraints for all use of land (no building permitted, no agricultural production, sport or camp sites etc.).
2. *500-1000 ppm lead zone* (590 hectares): contstraints for most use (treatment of soil before use, no transport of materials out of zone etc.).

The ADEME will perform the some obligations not fulfilled by the company:

1. Purchase of farms in zone > 250 ppm of lead; turn into forest.
2. Control of agricultural productions unfit for human or animal consumption in zone > 250 ppm lead.
3. Taking of responsibility for and the replacement of the stripped polluted soil and the demolition materials.

4. The monitoring of the quality of the sub-surface water.
5. The completion of the Detailed Risk Study.
6. Obligation of cleaning up the school play-grounds.