

Health Impact Assessment on the Adoption of Recommendations regarding Urban Operations in the Reconversion of

Industrial Areas with Contaminated Soils: Parque das Nações Case



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PROBLEM

- During the expansion of a hospital in the former industrial area of Parque das Nações, high concentrations of toluene, benzene, xylene, TPH C5-C10, TPH C10-C16, and heavy metals were detected.
- The technical commission (TC) set up for supervising this construction work, produced a set of recommendations regarding urban operations in the reconversion of industrial areas with contaminated soils.

POLICY

- These recommendations apply to several phases: assessment of soil quality; decontamination process (in case of contamination hazard to human health); continuous assessment of water and air quality, waste (including waste water) and occupational health during the implementation of the urbanistic operation.
- As Parque das Nações is a populated area (both residential and working area) and with high commercial value, it is important to evaluate the impact of adopting these recommendations using a health impact assessment strategy.

RESULTS

SCREENING

- The target population and the possible health impacts were identified. Education, employment, childcare, community interaction, access to sports activities, access to cultural and recreational activities and access to health services were identified as the social and economic conditions that may influence health.
- At the end of the screening it was decided to proceed with the HIA after some adjustments to the proposal.

SCOPING

The conceptual exposure model developed in the scoping allow to identify as main exposure pathway for the resident population the inhalation of volatile compounds.

Conclusions

Adequate recommendations and legislation regarding urban operations in the reconversion of industrial areas with contaminated soils to urban areas are essential to minimize exposure and protect citizens' health.

SCOPING

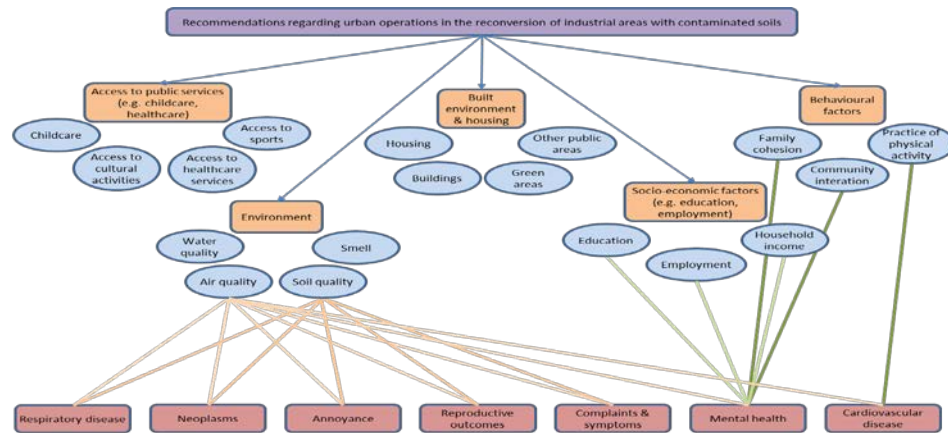


Figure 1. Causal pathway

Legend
— Positive impacts
— Negative impacts