



#### Sample collection from a meter scale pilot

## **PRIME**

# Platform for Remediation and Innovation in Environmental Metrology

The objective for all the PRIME platforms is to develop services in environmental metrology based on the understanding and quantification of reactive transport processes of pollutants in soils, sub-soils, sediments and aquifers.

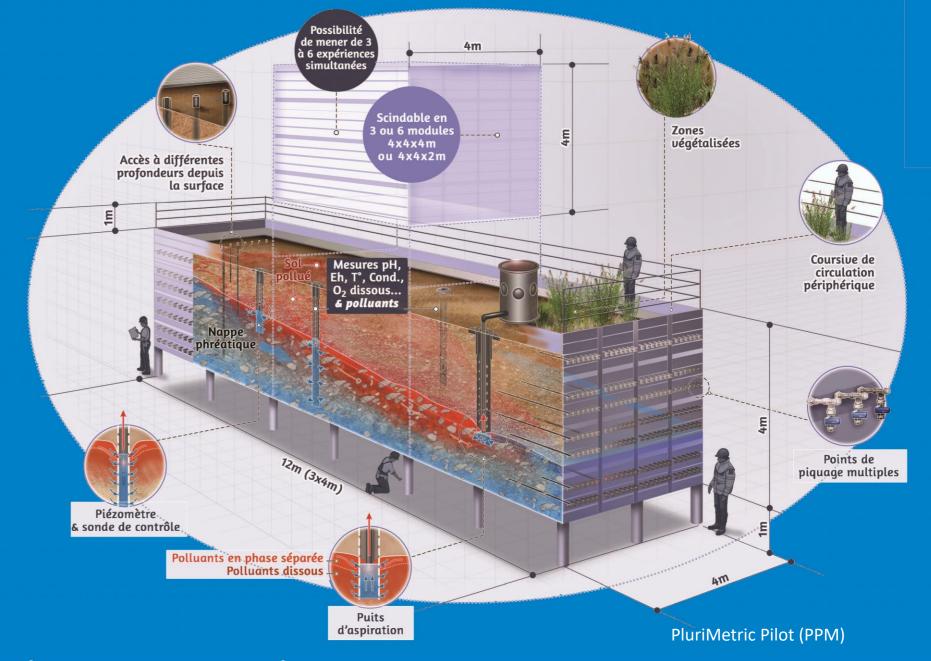
PRIME provides experimental means on a variety of scales, ranging from ml-reactors up to a 100 m3 pilot. These facilities make it possible to validate tools (sensors, samplers...), methods and techniques (physical, chemical and biological) dedicated to the remediation or the monitoring of degraded environments. All the means granted by PRIME are applicable in the framework of research projects that can be subsidized, collaborative or of service provision. Classified ICPE, the hall that houses PRIME provides partners with all the guarantees associated with this status, notably for industrial processes.

### Means

- Centimetric or decimetric-sized reactors of the "batch-type" (closed containers)
- Decimetric to metric-sized columns and tanks (H = 0.2 to 5 m, interior diameter = 0.05 to 1 m)
- Plurimetric Pilot (PPM 10 x 4 x 4 m which can be broken down into 3 independent modules)
- Laboratories and equipment for monitoring physical, chemical and microbiological parameters. Sampling (water, gas, solids) appropriate to all the spatio-temporal scales under study
- Scientific expertise and technical know-how that can be mobilized starting with the conception of the studies down to the interpretation and valorization of the results



On-line monitoring and multi



#### **Application examples**

- Simulation of ground water circulation in order to test sensors and passive samplers
- Migration and fate of contaminants through either fragmented solid matrixes (soils, sediments) or consolidated ones (rock) under non-saturated, saturated conditions, or a continuum of both, in aerobic or anaerobic environments
- Implementation and validation (comparison with standardized methods, mass balance, cost-benefit analysis) of remediation tools and processes (physical, chemical, biological) on various scales up to that of the industrial pilot

## www.plateformes-pivots.eu



Metric scale columns

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