

*Building Analytical Capacity in Mexico
to Measure Dioxins and Furans*

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MEXICO*

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Assessment capacity for measure COPs in México

- Governmental laboratories
 - Aldrin
 - Endrin
 - Clordano
 - Dieldrin
 - DDT
- Privates laboratories
 - Heptacloro
 - Hexachlorobenzene
- Research laboratories
 - Mirex
 - Toxafeno
 - BPC (aroclors)
 - Dioxin & furans

ACTUAL SITUATION

Ecology National Institute

- Laboratory Inventory (about 25 labs mainly research)
- 2 National Workshop for research
 - Questionnaire for laboratories-data base update (all labs included)

UNEP

Questionnaire for assessment capacity

INFORMATION

- Accredited Laboratories analyzing COPs and others compound
 - Soils
 - Hazardous wastes
 - Sediments
 - Water
 - Air
 - Tissues
- Sampling
 - Matrix
 - COPs
 - D&F

INSTRUMENTATION AVAILABLE

- GAS CHROMATOGRAPHY
 - ECD, FID, NPD
- GAS CHROMATOGRAPHY-MASS SPECTROMETRY
LOW RESOLUTION (measurements D&F)
- HIGH PERFORMANCE LIQUID
CHROMATOGRAPHY
- GAS CHROMATOGRAPHY-MASS SPECTROMETRY
HIGH RESOLUTION (ONLY 1 LAB)
- SEVERAL ANALYTICAL METHODS
 - Mainly EPA like references

Quality Assurance

- **ISO 17025 (ACCREDITED LABORATORIES)**
 - **PERFORMANCE METHODS**
 - **QUALITY CONTROL**
 - **QUALITY SYSTEM**
 - **STANDARD OPERATIONS PROCEDURE**
 - **REFERENCE MATERIALS**
- **OTHER QUALITY CRITERIA**
- **INTERLABORATORY EXERCISES**
- **ROUND ROBIN**

REQUIREMENTS

- Capacity building for analysis and treatment samples procedure
- To improve methodology performance
- To improve sensitivity
- To establish formal programs intercomparison (National and International)
- To improve installations labs (environmental conditions, clean room)
- Homogenization of methodologies and quality criteria
- D&F- Instrumentation
- Feasibility