

# **NATO/CCMS Pilot Study Meeting**

## **“Prevention and Remediation In Selected Industrial Sectors: Small Sites in Urban Areas”**

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**Tour de Table Presentation**

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# TOUR de TABLE 2006 - Athens, Greece

## Overview

- The situation of contaminated sites in Turkey
- Legal & administrative framework
  - Summary of legislation
  - New amendment to the Environmental Law
  - EU Environmental Screening Process
- Ongoing projects related to contaminated sites
- Conclusions

# The situation of contaminated sites in Turkey

Turkish contaminated sites are generally fall under the following key categories:

- Industrial facilities – spills, leaks and chemical storage
- Municipal and industrial waste disposal sites
- Mine tailing disposal sites
- Illegal waste dump sites

# The situation of contaminated sites in Turkey

A large fraction (about 80%) of contaminated sites are related to municipal and industrial waste disposal sites and illegal waste dump sites.

- Approximately 1.3 million tons of hazardous wastes are generated annually; about 63 % (820,000 tons) disposed of and stored on-site (i.e., land disposed); remaining 37 % (480,000 tons) is reused, recycled, or sold etc. (TÜİK, 2004)
- Approximately 24.2 million tons of MSW are generated annually (1.3 kg per capita); about 30 % is disposed of in sanitary landfills, about 67 % is disposed of municipal disposal sites, 2 % composted and 1 % incinerated (TÜİK, 2004)

## The situation of contaminated sites in Turkey

A complete inventory of contaminated sites in Turkey does not exist. The number, however, is likely in the range of 1000-1500. About 5-10 % of these sites are believed to be polluted sites need to be remediated.

Currently, identification and registration of contaminated sites is not systematic; mostly identified after experiencing environmental problems.

The major problem associated with identification and registration of contaminated sites is the lack of a national contaminated site management system.

# Legal and Administrative Issues

## Summary of Legislation

Major Law: Environmental Law (1983, 2005)  
Groundwater Law (1960)

### Major regulations:

- Water Pollution Control Regulation (1988, 2004)
- Solid Wastes Control Regulation (1991, 2005)
- Hazardous Chemicals and Products Control Regulation (1993)
- Hazardous Wastes Control Regulation (1995, 2005)
- Soil Pollution Control Regulation (2001)
- Environmental Auditing Regulation (2002)

None of these regulations provide an explicit legal and technical definition of contaminated sites.

# Legal and Administrative Issues

## New amendment to Environmental Law (April 2006)

Some important points to note concerning contaminated sites:

- Elaboration of hazardous chemicals and waste management issues

Waste generators are obliged to;

- Use appropriate technologies and methods to minimize waste generation and to dispose of their waste in accordance with HWCR
- Get organized to form their local or regional waste management service unions to fulfill their legal responsibilities. M of E&F provides financial and technical assistance to such service unions.

\* Industrial facilities are obliged to prepare their *emergency response plans* in order to minimize possible adverse environmental impacts in case of accidents. M of E is authorized to prepare related regulations to determine the rules and responsibilities.

# Legal and Administrative Issues

## New amendment to Environmental Law (*continued*)

- Elaboration of financial instruments for environmental protection
- Municipalities are provided with greater authorities regarding solid waste management issues, including establishment and operation of waste management facilities, and pricing the services that they provide
- Increased monetary and imprisonment penalties for the illegal waste dumping and violation of rules and regulations
- New items for soil protection and soil pollution prevention



# Legal and Administrative Issues

## EU Screening Process

As a part of the EU accession negotiations, Turkey has been going through a detailed Environmental Screening Process.

The aim of the process;

- harmonization of Turkish environmental laws, regulations and institutional structure with the EU
- identifying the gaps
- achieving conformity with respect to legal and institutional systems

# Legal and Administrative Issues

## EU Screening Process *(continued)*

Some of the major EU directives that Turkey seeks compatibility related to Contaminated Sites (out of about a total of 100 legal documents)

### Waste Management

- Waste Framework Directive (75/442/EEC)
- Hazardous Waste Directive (91/689/EEC)
- PCB/PCT Directive (96/59/EEC)
- Landfill Directive (1999/31/EC)
- Sewage Sludge Directive (86/278/EEC)

# Legal and Administrative Issues

## EU Screening Process *(continued)*

### Water Quality & Soil

- Water Framework Directive (2000/60/EC)
- Groundwater Directive (80/68/EEC)
- Dangerous Substances Directive (76/464/EEC)
- DSD Daughter Directives Hg, Cd, HCH (86/280/EEC)
- Nitrates Directive (76/464/EEC)
- Thematic Strategy on Soil Protection (COM 2002)

# Legal and Administrative Issues

## EU Screening Process *(continued)*

### Industrial Pollution Control (Risk Management & Chemicals)

- IPPC Directive (96/61/EC)
- Waste Incineration Directive (2000/76/EEC)
- Seveso Directive (96/82/EC)
- Dangerous Substances Directive (67/548/EEC)
- Risk Assessment Regulation (EEC No 793/93)

## On-going Projects

A number projects have been implemented jointly by the M of E&F and various European partners in an effort to closing the legal and institutional gaps between Turkey and the EU.

Funding to these projects are mostly provided by the EU funding agencies and partly by the M of E&F.

# On-going Projects

Same examples of on-going soil & groundwater related projects:

- Implementation of Water Framework Directive in Turkey (2 years - 500,000 Euro)
- Implementation of Nitrates Directive in Turkey (2 years - 400,000 Euro)
- Strengthening the Capacity for Sustainable Groundwater Management (Transposition and Implementation of Groundwater Directive) (2 years - 350,000 Euro)

## On-going Projects *(continued)*

- Capacity Building for Waste Management in Turkey  
There are two components;
  - Twinning Project; harmonization of all waste related directives (2 years)
  - Heavy Cost Environmental Investment Planning Project (2 years – 6 million Euro)
- POPs National Inventory and Implementation Action Plan
- Development of Contaminated Site Management Strategies for Turkey (**new proposal**)

# Conclusions

- The major problem associated with contaminated sites is the deficiencies of the current waste management system in Turkey (especially, insufficient number of disposal facilities - slow progress due to lack of money)
- Full conformity with EU directives is targeted by 2008
- Transposition and implementation of waste management related directives are priority in the short-run
- Capacity building and strengthening institutional structure is a mid-range priority