

Italy: the new legislation on the remediation of contaminated sites

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Tour de Table

NATO CCMS Pilot Study Meeting

5-7th June 2006, Athens, Greece

Legal references

Old

- ◆ Decree (Government delegated by Parliament) 22/97 of february 5th 1997, Waste Act
- ◆ Environment Ministry Decree (D.M.) 471 of october 25th 1999

New

- ◆ Law n. 308/04 of december 15th 2004 for the “integration, coordination and rearrangement of environmental legislation”
- ◆ Decree (Government delegated by Parliament) n. 152/2006 of april 3rd, in force since april 29th 2006 : “Norms on environmental matters”.
 - ◆ Part IV, Title V: “Remediation of contaminated sites”

Main changes

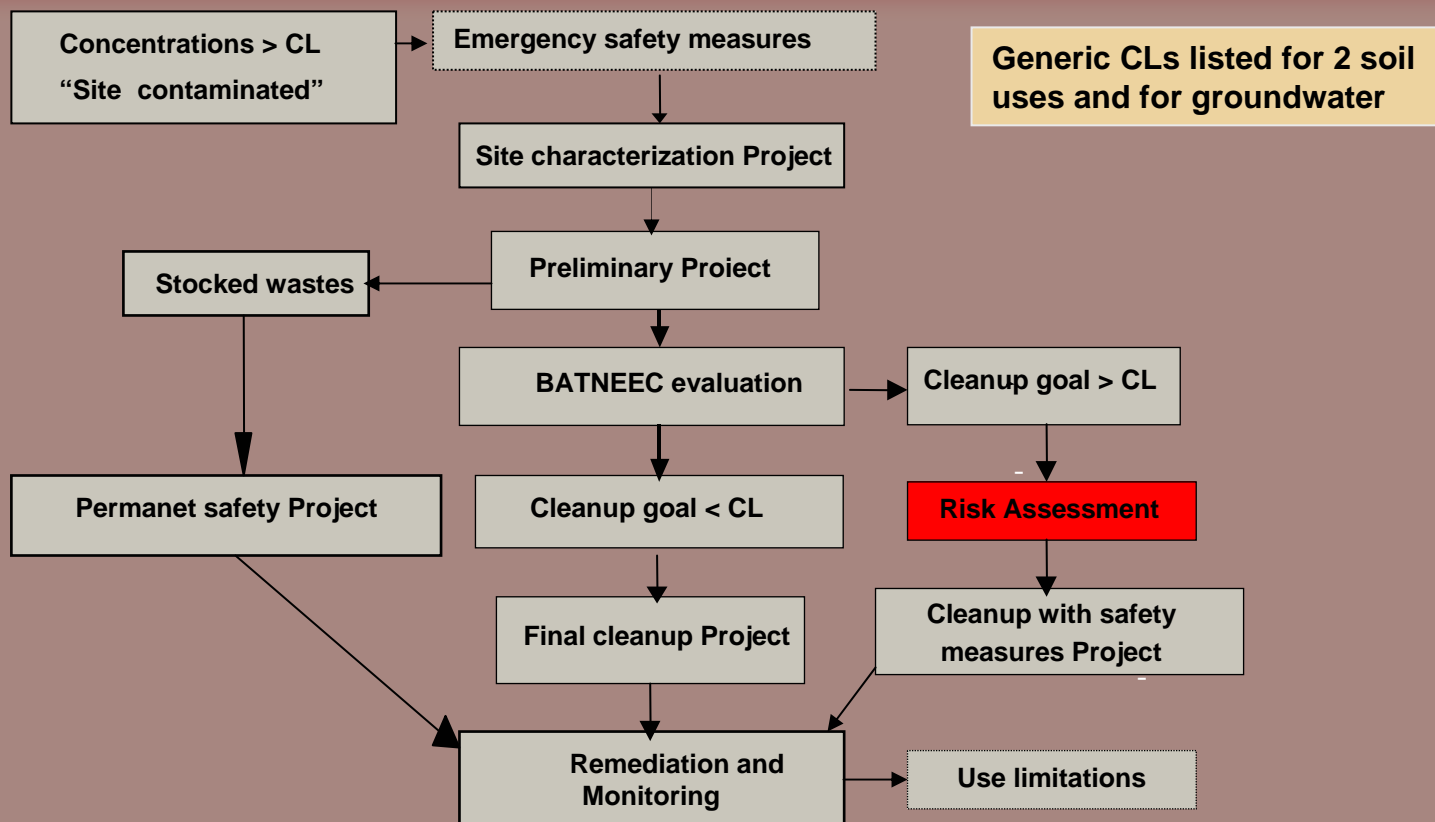
Old

- ◆ Law 22/97 and D.M. 471/99 established strict rules and objectives (generic limit concentration values in soil and gw) as thresholds for the identification of contaminated sites and as cleanup goals. Very limited space to risk-based solutions. No distinction between historic/new contamination and dismissed/operating sites.

New

- ◆ Law n.308/2004 anticipated main strategic changes by calling for flexible, risk-based and site-specific criteria for the management of contaminated land to be integrated with (screening) generic criteria. The new policy, to be defined by a specific decree, should also set specific criteria for taking care of contamination at active operating sites.

Old procedure D.M. 471/99



Permits & timing:

- Emergency safety measures - implementation in 48 hours
- Site characterization Project- proposal in 30 days
- Preliminary Project
- Final Project - one year; permit issued in 90 days

Main responsible authorities for issuing permits:

- Municipality and Region (except for sites of national interest)
- Province issuing clean up certificate - >5 years for safety measures

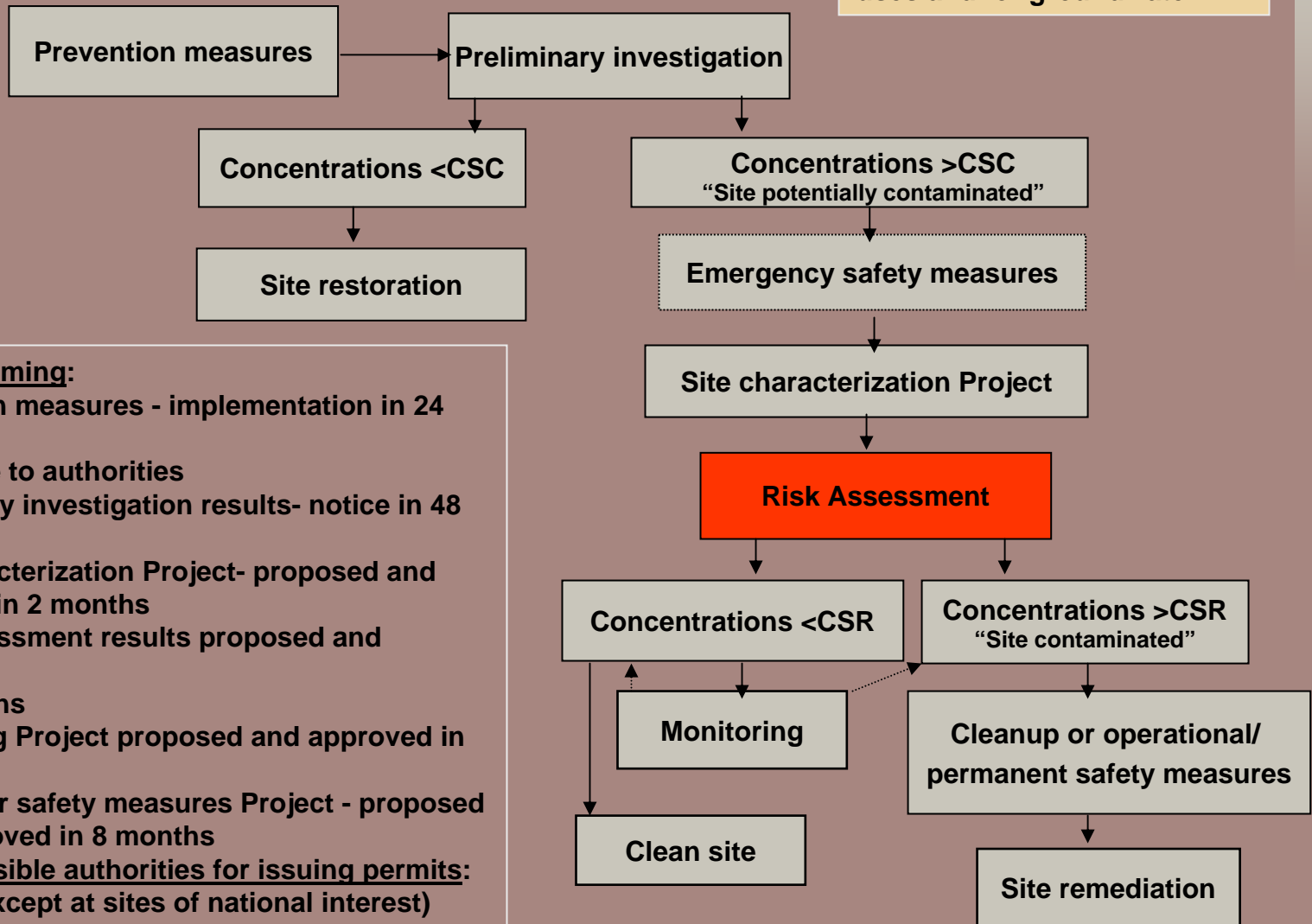
New Decree 152/06, Part IV, Title V

Defines:

- ◆ “potentially contaminated site” and generic *threshold concentration levels (CSC)* for soil and groundwater;
- ◆ “contaminated site” and site-specific *risk concentration levels (CSR)*;
- ◆ “non contaminated site” and “cleaned up site”;
- ◆ emergency, permanent and operational safety measures;
- ◆ typologies of emergency conditions;
- ◆ site-specific human health and environmental risk assessment criteria for the estimate of *CSRs*;
- ◆ administrative and operational procedures;
- ◆ criteria for restoration/requalification aimed at site redevelopment.

New procedure, Decree 152/06

Generic CSCs listed for 2 soil uses and for groundwater



Permits & timing:

- Prevention measures - implementation in 24 hours and notice to authorities
- Preliminary investigation results- notice in 48 hours
- Site characterization Project- proposed and approved in 2 months
- Risk Assessment results proposed and approved in 8 months
- Monitoring Project proposed and approved in 3 months
- Cleanup or safety measures Project - proposed and approved in 8 months

Main responsible authorities for issuing permits:

- Region (except at sites of national interest)
- Province for issuing clean up completion certificate

Other changes

Water resources

- ◆ The new legislation allows for:
 - ◆ discharging of extracted groundwater into surface water bodies according to emission limits
 - ◆ reinjection of treated groundwater into same gw body provided that quality objectives in gw body are fulfilled
 - ◆ compliance with gw objectives (CSRs) may be fulfilled at some distance from contaminant source

Risk assessment

- ◆ Focuses on human health and groundwater protection
- ◆ Incremental lifetime cancer risk at 10^{-5}
- ◆ Major indoor and outdoor exposure routes defined.
Methodological reference: ASTM standards
- ◆ Site characterization and conceptual model identification steps defined

Comments

Wishes

- ◆ Application of state of art and innovative risk reduction technologies encouraged
- ◆ Dig&dump of soil and permanent confinement of large areas prevented/reduced
- ◆ Scientifically sound and robust risk assessment methodology and tools defined, expertise improved

Problems

- ◆ New generic CSCs screening levels confirmed same values as former CLs: non proved as risk-based!
- ◆ Training efforts needed within administrations: old debate “risk assessment y/n” may emerge again