## The 1<sup>st</sup> International Conference on Environmental Safety and Ecological Criteria (ICESEC 2013)

Nanjing, China

June 30 - July 02, 2013

## THE COMPARISON BETWEEN THE SOIL ENVIRONMENT MANAGEMENT SYSTEMS OF EUROPE AND CHINA AND SOME SUGGESTIONS

<u>Wang Haiyan</u><sup>1</sup>, Wu Xuefang<sup>1</sup>, Wang Zongshuang<sup>1</sup>, Daniele Brombal<sup>2</sup>, Elisa Giubilato<sup>3</sup>, Andrea Critto<sup>3</sup>, Antonio Marcomini<sup>3</sup>

<sup>1</sup> State Key Laboratory of Environmental Criteria and Risk Assessment, Chinese Research Academy of Environmental Sciences, 100012 Beijing, China;

<sup>2</sup> Department of Asian and North African Studies, University Ca' Foscari of Venice, Dorsoduro 3462, 30123 Venice, Italy;

<sup>3</sup> Department of Environmental Sciences, Informatics and Statistics, University Ca' Foscari of Venice, Calle larga S.Marta 2137, 30123 Venice, Italy.

This paper aims at introducing a comparison between soil environment management systems of Europe and P.R.China. Main features of soil environment management systems of P.R.China and EU—and/or some EU selected countries—are analyzed, focusing on their respective development history, management procedure, information release, stakeholder involvement, soil monitoring system, financial mechanism, assessment of the policy implement, as well as providing an overview of policies, laws, regulations and standards pertinent to soil environment management, and the introduction about their latest progress.

On the basis of the comparison between the two systems, the following shortcomings are individuated in the case of Chinese soil environment management: (a) lack of adequate monitoring system(s) and detailed background information; (b) shortcomings in risk assessment practices; (c) rigidity in the soil quality standards, not adaptable to the diverse soil conditions in China; (d) lack of remediation standards, as well as standards pertinent to the assessment of most appropriate remediation technologies.

In the final section of the paper, a few recommendations are put forward with reference to the enhancement of soil environmental management in P.R.China—with particular reference to standards—consistently with the major priorities individuated by the State Council in defining soil environment protection and integrated treatment in the near future.