Laws, regulations and standards for soil environment protection in China

1 - National laws and regulations

At present, there is no national legislation regarding contaminated soil management at national level. National provisions relevant to soil are dispersed across various regulations, including Constitution, the Environmental Protection Law, and some sectoral laws and regulations targeting land administration, solid waste, pollution, water, environmental substances, agricultural land, and the real estate industry. National regulations are often piecemeal and inconsistent. All existing laws and regulations are not systematic or consistent. They are too general, lacking operational details and accountability policies. Control, prevention and requirements, and measures pertaining specifically to land pollution, are largely missing. In addition, some administrative departments, like MEP and the General Office of the State Council, issued a few management files enhancing soil environment protection.

2 - National standards and guidelines

The key national standards and guidelines are listed in Table 2. In particular, MEP issued 5 important standards and guidelines related with contaminated sites in 2014, which are highlighted in the table. These standards will direct the soil contamination investigation, risk assessment and remediation.

### 3 - Local laws, regulations and standards

The void in terms of national laws and regulations has been partially filled by local authorities located in developed regions of China, where the need to manage contaminated sites is more pressing. Considerable work in this field has been done by Beijing, Shanghai, Guangdong, and some municipalities, as well as by Zhejiang province and Shenyang prefecture, as can be seen in Table 3. In some cases, standards introduced locally have been later adopted nationwide.

### 4 - Local Priority List (NPL) Sites

Some member states set up NPL sites to solve soil pollution problems more efficiently. For example, Italy has identified 54 NPL sites with area of 975,068 ha. At local level, there are 4,400 contaminated sites and more than 13,000 potentially contaminated sites. For NPL sites, up to 50% of the costs for remediation of areas owed by the public could be covered by the government. However, when the polluter cannot be identified or cannot bear the costs, financial transaction can be carried out between the state and the private.

### 5 - Financial mechanism

EU has applied many financing techniques:

- **cost increment financing**: according to the level of risk, there will be different financing ratio. The benefits sharing & claw-back development charges can be integrated into the remediation actions.

China has no clear and effective rule on financial policies:

It should be regulated in the drafting of the law for the prevention and control of soil pollution, and national financial policy for soil environment management of contaminated sites. Local laws and regulations could improve the financial rules based on respective features.