



# FACT SHEET: SOIL REMEDIATION

**CHINA SOIL REMEDIATION OPPORTUNITIES**

## Fact Sheet --- China Soil Remediation Opportunities

Soil contamination is a growing concern that is gaining more and more attention in China. China has been conducting a nationwide soil pollution survey since 2006. For example this survey has shown that 20% of China's farmland is contaminated from the overuse use of pesticides. In addition, the urban development in China has resulted in the relocation of industrial facilities to rural areas that has also exacerbated soil pollution. At least 10% of cultivated land has been polluted with heavy metals. Based on this China is already suffering direct economic losses caused by farmland pollution, which leads to reduced grain production and public concerns of food safety.

Contaminated brownfield sites are becoming increasingly common in major Chinese cities as urban sprawl has overrun many polluting factories, pushing them to new locations and leaving the contamination behind. Home buyers are facing the risk of living in buildings that were once contaminated by old factories and chemical plants. Soil pollution already threatens the sustainability of economic growth and social stability.

In light of these severe problems, to prevent China's soil quality from further degrading and to protect the safety of China's land use, the Ministry of Environmental Protection (MEP) of China has one of the main goals regarding soil pollution prevention and control is to actively carry out international exchanges and cooperation.

In effort to curb soil pollution, China has just released the Prevention and Control of Soil Pollution Action Plan (10-Chapter Soil Pollution Action Plan) in June 2016. This new Action Plan will be adopted and put in effect to strictly protect the land and control pollution. According to the speculation about the Action Plan, the cost of making all China's contaminated land fit for agricultural use and redevelopment would be approximately 5 trillion yuan (\$760 billion). The current 100 key soil remediation projects underway require 500 billion yuan (\$76 billion). The funding involved with soil remediation will continuously grow in the long term. The government will set up a special fund to tackle soil pollution, as well as separate fund to upgrade technology and equipment in soil remediation and site characterization. The major target on soil remediation and land restoration would be on agricultural land, heavy metal or VOC impacted soil including mining tail, manufacture industry, oil production and refinery sites, as well as landfill and waste disposal sites.

Even though there is a strong initiative for better policies, the country still lacks sound technology to manage, investigate and remediate the contaminated sites. It is estimated that there are 300,000 to 600,000 contaminated industrial sites in China. Remediation for such sites has become an urgent need as the country's rapid urbanization creates a huge demand for usable land, in which the existing remedial and environmental site characterization technology is not up for such enormous work. Technologies and services including remediation, soil analysis and monitoring, site modeling and data management are among the most needed by Chinese environmental sectors to fulfill the requirement of the Action Plan. The country's 12<sup>th</sup> Five Year Plan aims to raise the urbanization rate from 47.5 % in 2010 to 51.5 % by the end of 2015. With more people moving from rural areas into the cities therefore clean and safe land is essential creating a potential opportunity for the U.S. companies who can provide the remedial support to fulfill the huge demand for soil protection in China.