

A CHINA ENVIRONMENTAL HEALTH PROJECT FACT SHEET

Medical Waste and Health Challenges in China

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The well-known 1988 outbreak of Hepatitis A in Shanghai from abandoned medical waste [1] and the more recent SARS outbreak highlighted how medical waste management in China is a serious issue. Hospitals are often described as “curing at the front door and poisoning at the back door,” and one Chinese researcher recently stated that the country’s 171 incinerators for medical waste do not meet pollution control standards. [2]

The Health Threats from Medical Waste

According to State Environmental Protection Administration (SEPA) figures, China now produces more than 1,500 tons of medical waste a day. In 2002, Shanghai alone produced 20,000 tons of medical waste while the urban areas of Chongqing and Kunming produced 1,700 tons and 1,400 tons, respectively. Hospitals often dispose of medical waste by burying it, a method only suitable only to non-hazardous wastes, leading to unsanitary conditions where viruses can be transmitted and toxic materials leached. Although now officially banned, in Guangdong there are cases of medical waste being used as fertilizer. Used needles from medical facilities can transmit serious diseases, such as HIV and hepatitis. Improper management of discarded needles and other sharps can pose a health risk to the public and waste workers. For example, discarded needles may expose waste workers and scavengers to needle stick injuries and potential infection. Janitors also are at risk if loose needles or sharps poke through plastic garbage bags. Insufficient standards on incineration of medical waste can lead to the generation of the carcinogen dioxin [3].

Addressing the Challenge

In recent years, the national and local governments have taken action to improve medical waste management. The Chinese government has focused on centralized treatment of medical waste as opposed to individual hospital disposal. However, there are currently very few centralized disposal plants of medical waste—currently facilities exist in Guangzhou, Shenyang, Anshan, Dalian, Panjin, Xining, Hangzhou, Nanning, and Fuzhou. Recent medical waste treatment projects, worth a total of 230 million RMB, were conducted by SEPA in Beijing, Chongqing, Shenzhen, Guilin, Haikou, Changsha, Yangzhou, Yinchuan, Xi’an, Wuhan, and Qingdao.

The Regulation to Standardize Disposal of Dangerous and Medical Wastes [4] was passed in June 2003 by the National Development and Reform Commission, SEPA, and the ministries

of finance and construction. Besides giving citizens the right to complain about improper disposal of medical waste, the regulation gave 6.89 billion RMB over 3 years to build 300 centralized disposal facilities for medical waste in addition to 31 hazardous waste treatment centers and 31 warehouses for radioactive waste. In June 2003, the Regulations on Administration of Medical Waste provided that all cities at the prefecture level and above must have a centralized medical waste treatment facility within one year and all county-level cities must have one within two years. In 2003 and 2004, a SEPA-led delegation visited the United States to study hazardous and medical waste disposal technology. Most recently, in 2006, SEPA and the Global Environment Facility announced a four-year \$45 million dollar project to reduce the production of Persistent Organic Pollutants (POPs) during the disposal of medical waste. Starting on 31 December 2007, the State Council will conduct China's first one-year nationwide survey to track down specific sources of pollution, including medical waste, and SEPA will publish the results in 2009 [5]. On a local level, the Shanghai government will allow only certified organizations to dispose of medical waste after 1 March 2007. Centralized treatment facilities in the city are able to dispose of 20,000 tons of medical wastes a year [6].

References

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