

# **A CHINA ENVIRONMENTAL HEALTH PROJECT RESEARCH BRIEF**

## **The Management of Imported Solid Waste in China**

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Since the mid-1980s, an enormous amount of solid waste, including waste paper, scrap steel and plastic, has been imported into China for recycling. While such imports alleviated domestic shortages in the recycling industry and generated jobs, they were largely unregulated. Improper recycling methods and dumping of toxic scraps—particularly from imported electronic wastes—created serious air, water, and soil contamination. To stem the environment and human health threats from waste pollution, while also maximizing the recycling of waste, the Chinese government began in 1996 to institute strict laws and regulations to manage imported waste.

### **Overview of Imported Solid Waste**

Over the past twenty years, imported wastes have become a growing source of much-needed raw materials in China. The amount of imported solid waste for recycling dramatically increased from 10.68 million tons of solid waste in 1999 to 38.95 million tons in 2006. Waste paper, scrap iron and steel, motor parts and plastics account for most of this increase. In 2005, imports were composed of 43% waste paper; 23% scrap iron and steel; 17% scrap motor, cable and electronic appliances; 13% scrap plastic; and 4% scrap copper, aluminum, zinc, and fiber. While imported wastes do provide additional important raw materials, they account for much less than the amount recycled from domestic sources, which in 2005 included 69 million tons of scrap iron, 35 million tons of waste paper, and 10.96 million tons of scrap plastic.<sup>1</sup>

Industrialized countries such as the United States, the European Union and Japan are the main waste exporters into China. Most of the international waste is recycled in provinces along the east coast, such as Guangdong, Zhejiang, Jiangsu, Shandong, and Tianjin.

Prior to 1996, China lacked any form of regulation to manage imported wastes, which led to considerable hazardous waste or useless garbage being imported from industrialized countries. In the 1980s and early 1990s there was considerable public outcry in response to Chinese news reports of accidents or contamination stemming from *Yang Laji* (foreign garbage). For example, when American garbage was discovered dumped in a suburb of Beijing, local residents began asking how such wastes could sneak into the country. Researchers and the news media warned that unless something was done, China was going to turn into the world's largest dumping ground, exacerbating the country's own domestic waste problems.

### **Laws, Regulations and Standards for Importing Solid Waste**

To prevent the shift of hazardous waste from developed countries to developing countries,

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<sup>1</sup> Source: “十一五”资源综合利用指导意见, online at: <[http://www.sepa.gov.cn/law/hjjjzc/gjfb/200702/t20070214\\_100866.htm](http://www.sepa.gov.cn/law/hjjjzc/gjfb/200702/t20070214_100866.htm)>

United Nations Environmental Planning (UNEP) created the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal in 1989. China ratified the Basel Convention on March 22, 1990. Beginning in the late 1990s, in response to concerns about the growing importation of wastes and to carry out the Basel Convention, the Chinese government began passing laws and regulations to better regulate the recycling, storage, and disposal of imported wastes, as well as banning imported waste that cannot be used as raw materials. In 1996, the following series of laws, regulations and standards for importing solid waste were put into effect, many of which are being updated to improve waste management and monitoring.

*Law on the Prevention of Environmental Pollution Caused by Solid Wastes* was adopted by the National People's Congress (NPC) on October 30, 1995 and became effective on April 1, 1996. It was amended by the NPC on December 29, 2004 and the changes came into effect on April 1, 2005. The law comprehensively regulates the system of prevention and treatment of environmental pollution by solid waste. It is divided into general terms: supervision and management of environmental pollution of solid waste, prevention and treatment of environmental pollution by solid waste, special stipulation on the prevention of environmental pollution caused by hazardous waste, and legal responsibilities and appendixes.

*The Interim Provisions on Administration of Environmental Protection on the Import of Waste and its Supplementary Provision* were promulgated by SEPA, Ministry of Foreign Trade and Economic Cooperation, General Administration of Customs, State Administration of Industry and Commerce and State Administration for Import and Export Commodity Inspection on April 1, 1996. These provisions allowed the importation of 30 types of waste used as raw materials under nine categories: (1) base metal scraps (especially iron, steel, copper, and aluminum); (2) smelt slag; (3) wood and wood articles wastes; (4) waste and scrap of paper or paperboard; (5) textile waste; (6) animal wastes; (7) waste electric motors, as well as electric scraps, wires and cables; (8) waste transportation equipment; and (9) other wastes demanding special treatment.

In October 1996 a tenth waste—plastic scraps—was added to the categories. Wastes outside of these ten categories were prohibited against import.

In order to regulate the management of import waste, adapt the general trend of WTO accession and conform to the administrative examination and approval systems reform by the State Council, SEPA made significant adjustments and reforms for import waste management in 2001, and divided waste into the follow three licensing categories: restricted, automatic and prohibited import.

*List of Restricted Imported Solid Wastes that Can Be Used as Raw Materials.* Any imported wastes that need to be sorted or cured before recycling or could cause slight harm to the environment are listed as restricted imports. The list permits 21 types of wastes that can be controlled or reduced, which includes: cane molasses; slag and dross from the manufacture of iron or steel; scrap and leftover plastics; scrap stainless steel; compressed waste cars; waste motors; wires and electronic appliances; scrap tungsten, magnesium, and titanium; as well as waste ocean vessels and other floating structures for breaking up.

*List of Automatic-Licensing Imported Solid Wastes that Can Be Used as Raw Materials.* To streamline the importation of recyclable wastes that pose negligible environmental impacts, in December 2001, a new list was issued that identifies wastes that can be given automatic licenses. The 24 types of wastes that can be directly recycled with little or no pretreatment within China includes waste bones, wood, paper and cardboard, textiles, and scrap iron, copper, nickel, aluminum, zinc, tin and tantalum.

*List of Wastes Prohibited Against Import.* This list includes 53 kinds of waste, such as: urban garbage, medical waste, waste organic solvent, waste clothes, waste tire and tire pieces, battery waste and scrap, used battery, as well as 21 household appliances and waste electric motors including air-conditioners, televisions and computers (including their parts and accessories, dismantled parts, broken parts and scraps unless stipulated otherwise by the State).

*Catalogue of Goods Prohibited against Import (Batch III)* (bulletin No. 36, 2001, issued by the Ministry of Foreign Trade and Economic Cooperation (MOFTEC), China General Administration for Customs and SEPA) identified 18 kinds of solid wastes prohibited against import.

*Catalogue of Goods Prohibited against Import (Batch IV and V)* (bulletin No. 25, 2002, issued by MOFTEC, China General Administration for Customs and SEPA) added 37 kinds of solid wastes prohibited against import.

The most recent version of these provisions is Bulletin No. 5, 2005, which is currently being revised by SEPA, China General Administration for Customs and Administration for Quality Supervision, Inspection and Quarantine (AQSIQ). These new provisions include 45 types of solid wastes that can be used as raw materials.

*Environmental Protection Control Standards for Importing Waste Used as Raw Materials* includes 12 tentative standards released in 1996 that outline environmental indicators that restrict radioactive, hazardous, and municipal waste from entering China. Such wastes require licensing for import and must be carefully inspected. Thirteen formal standards were issued in 2006.

### **Policy on Managing Imported Solid Waste**

The Chinese government has adopted a dual strategy to control environmental pollution from imported wastes—controlling the kinds of waste imported and supervising the recycling processes within China. The policies on managing imported solid waste include:

*Prohibition of Import:* China bans dumping, storage and disposal of imported solid waste in its territory. Moreover, imports of solid waste that cannot be used as raw materials or used in an environmentally sound way are also prohibited. China also does not permit the transfer of hazardous wastes through its territory.

*Import Licensing:* Solid wastes that can be used as raw materials may not be imported without consent in the form of an import license. There are two kinds of import licenses: (1) an import license for restricted solid waste that can be used as raw materials; and (2) an import license for automatic-licensing solid waste that can be used as raw materials.

*Environmental Standards, Inspection and Quarantine:* Imported solid waste must meet national environmental protection standards and be examined and approved by the Administration for Quality Supervision, Inspection and Quarantine. Foreign waste shall not be shipped to China until it is approved through a pre-shipment inspection.

*Penalties:* Those who ship solid waste from outside China and dump, store, or dispose of the waste inside the country and those who import prohibited or restricted solid waste without permission, shall be ordered by customs to ship the waste back and may be subject to penalties. Those who transport hazardous waste via the territory of China shall be ordered by the customs to ship the waste back and also may be subject to penalties. Those who smuggle solid, liquid or gaseous garbage into China could face a sentence of up to five years in prison and a fine.

*Environmental management policies:* As a means to check the management and recycling of waste once it is imported, SEPA issued a number of important policies which include: (1) forbidding the sale of imported wastes to others domestically; (2) permitting only one license per customs port; (3) supervising the approval of permits; (4) requiring that a recycling plant's license be granted to the nearest port so as to limit transport distances of wastes; and (5) limiting imported wastes that pose high environmental risks to treatment in designated factories or reuse in renewable resource parks.

### **The Managing and Coordination Agencies**

Under existing regulations, imported waste is managed by 5 government departments: the State Environmental Protection administration, the General Administration of Quality Supervision, Inspection and Quarantine, China General Administration of Customs, National Development and Reform Commission and Ministry of Commerce.

*State Environmental Protection Administration (SEPA)* as the lead agency is responsible for: (1) organizing related departments to draft laws, regulations, catalogues and policies; (2) coordination among different departments; (3) implementation of Basel Convention and licensing of waste import; and (5) supervision of pollution prevention efforts of waste exporters and users of imported waste.

*General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ)* is responsible for: (1) registering overseas suppliers of waste materials and domestic recipients; (2) conducting pre-shipment inspection and entrance inspection, and quarantine according to environmental control standards; and (3) issuing Customs Clearance Form of Entry Goods for accepted wastes.

*China General Administration of Customs* is responsible for taking charge of entry inspection, duty collection, and clearance based on import permit, as well as for combating waste smuggling.

*National Development and Reform Commission and Ministry of Commerce* participates in drafting laws, regulations, catalogues and policies of import waste.

### **Remaining Challenges**

Through an increasingly strict management system, the transfer of hazardous waste and

trash is now much better controlled in China. While the majority of environmental risk of imported wastes has been reduced, some Chinese dealers smuggle or associate with overseas organizations to illegally bring foreign garbage into China, endangering public health and the environment. SEPA thus continues to work with other government departments to improve regulations and standards regarding waste imports, as well as enhance supervision in processing waste and fighting waste smuggling.

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