

Prevention and Control of Mercury Pollution in China

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- It is well known that China is one of the four ancient civilizations in the world, so it has a long history of development and utilization of mercury resources.
- As a chemical substance with wide applications, mercury has been applied in many processes and products.
- The Chinese people have understood the toxicity of mercury for a long time.

- The Chinese Government has always attached great importance to the prevention and control of mercury pollution and the alternative options for mercury-containing products. It has taken a lot of measures with remarkable achievements.

The Chinese Government believes

- The Chinese Government believes that, to control mercury pollution at global level, the best approach and priority task are seeking and using safe alternative technology and products and halting the manufacture, trade and consumption of mercury-containing products in an all round way.

The Chinese Government believes

- The international community should carefully study the supply and demand for mercury with a justice and fairness. With safe substitution, we can gradually meet the objective of reducing mercury demand and supply and protecting human health and the environment.

Production and Use of Mercury in China

- China used to be a big player in mercury resource in the past.
- China had relatively complete enterprises and technical institutes engaging in the mining, metallurgy and fabrication.
- Mercury resources gradually depleted since 1990s, as a result, many relevant enterprises have shut down.

Production and Use of Mercury in China

- It has gone up since 2001 due to new extraction technology in some places and high recovery of mercury containing waste.
- At present, mercury in China is mainly used to manufacture PVC by acetylene in chemical industry and glass thermometer and sphygmomanometer products in medical device industry.

II. Prevention and Control Measures for Mercury Pollution in China

- **1. Ban and phase out out-of-date technology and reduce mercury consumption by macro regulation**
- the Standard for Mercury Free Battery (HJB Z009 - 95) in 1995.
- In 1996, it suppressed small gold mining enterprises that use mercury in the mining process.

date technology and reduce mercury consumption by macro regulation

- In 1997, it issued the Regulations on Restricting Mercury Concentration in Battery Products.
- In 1999, it issued the Inventory on the Phasing Out Out-of-Date Production Capacity, Technology and Product (First Group), which lists the mercury-process caustic soda and indigenous mercury extraction process as out-of-date production technology that shall be phased out at once; mercury containing battery as an out-of-date product and phasing out the gold extraction by mercury process by 2002.

II. Prevention and Control Measures for Mercury Pollution in China

- **1. Ban and phase out out-of-date technology and reduce mercury consumption by macro regulation**
- In 2005, it issued the Catalogue for the Guidance of Industrial Restructuring, which lists the mercuric chloride catalyst, mercury glass thermometer, mercury sphygmomanometer, arquerite dental material projects as the restricted development projects.

II. Prevention and Control Measures for Mercury Pollution in China

- **1. Ban and phase out out-of-date technology and reduce mercury consumption by macro regulation**
- The implementation of these policies and standards has obtained obvious achievements and reduced the demand of some industries for mercury at some extent. For example, mercury consumption of the battery industry decreased by two thirds in 2002 compared with that of 1995 .

II. Prevention and Control Measures for Mercury Pollution in China

- **2. Enhance study, improve management and control mercury pollution**
- China began the research on the control of mercury pollution in 1970s.
- it specifies the mercury limits for the quality of water, air, soil and marine environment and mercury pollution release/control standards for water, air and solid wastes as well as relevant food sanitation standard, product standard and environmental label products.

II. Prevention and Control Measures for Mercury Pollution in China

- **3. Total amount control for the import of mercury**
- In 2002, it established the principle of setting the import amount according to the use, total amount control and utilization at the fixed place. The total import amount is controlled at about 200 tons each year (no import in 2005).
- With close cooperation of General Administration of Customs, China has effectively controlled illegal import and use of mercury.

II. Prevention and Control Measures for Mercury Pollution in China

- **4. Strict control of the recycling and utilization of mercury containing waste to prevent secondary pollution**
- The authority has carried out permit system for the recycling of mercury waste.
- It shall not begin the collection, transportation and utilization of mercury waste until the experts think it OK after site inspection.
- Any one who violates relevant regulations shall be subject to severe penalties according to law.

II. Prevention and Control Measures for Mercury Pollution in China

- **5. Actively carry out international cooperation on the control of mercury pollution**
- In 2006, SEPA and US EPA launched the China-America Demonstration Program on the Reduction of Medical Mercury Waste.

III. Existing Problems and Challenges

- **1. Lack of understanding of the background information**
- After China shifts its planning economy into the market economy, the original competent industrial administrative departments disappear and industrial associations have not fully developed.
- Therefore, the authority lacks the statistics of the enterprises consuming mercury.

III. Existing Problems and Challenges

- **1. Lack of understanding of the background information**
- It is a fact that there are such phenomena of illegal production and import of mercury and illegal recycle of mercury waste.
- At present, there is no national consensus on mercury consumption and there is poor consistency among the data from each source.

III. Existing Problems and Challenges

- **2. Lack mercury alternative products and some mercury containing products and technologies still in use**
- Recently, with introduction of the experience of developed countries, China takes necessary measures to restrict or phase out mercury-containing technologies and products.
- However, some industries have slow progress due to lack of alternative products and technologies.

III. Existing Problems and Challenges

- **3. Increasing gap with developed countries**
- At present, there is still relatively big amount of intentional consumption of mercury in China.
- As a result, there is a big gap between China and developed countries in terms of overall prevention and control of mercury pollution.

IV. Work in the future

- **1. Carry out further investigation on the current status of manufacture, consumption and recycling of mercury**
- **2. Improve technology level and reduce the release of mercury pollutant.**
- **Government departments will raise technical level of the industries consuming and processing mercury and adjust its industrial structure.**

IV. Work in the future

- **3. Develop and promote alternative technologies and reduce the consumption of mercury**
- **enhance the development, introduction and extension of alternative products and technologies.**
- **strengthen the research and demonstration of clean production and alternative technologies of major industries with mercury pollution and reform and phase out the technologies using mercury .**
- **4. Actively take part in relevant activities of international communities**

Thanks