



The latest policies for chemical environmental management in China

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1. The latest environmental situation



Important instructions to "strengthen the management of chemicals" from the country leaders



Action Plan On Water Pollution Prevention , April 2015.



Action Plan On Soil Pollution Prevention ,
still being formulated



1. The latest environmental situation

Action Plan On Water Pollution Prevention

→ 3 tasks in chemical management:

- (17) Perfect laws and regulatory standard. Speed up the revising of laws and regulations on the prevention and control of water pollution, marine environmental protection, pollutants discharge permits, ...**chemical environmental management**



1. The latest environmental situation

Action Plan On Water Pollution Prevention

- (22) Strict environmental risk control Evaluate existing chemical environmental and health risks, publish the priority control list of chemicals before the end of 2017, strictly restraint on the product and use of high risk chemicals, and drive the substituting and phasing out of these chemicals gradually



1. The latest environmental situation

Action Plan On Water Pollution Prevention

- (26).....

Strict control on EDCs pollution. Complete the investigations into the production and use of EDCs before the end of 2017, monitoring the risk of water source zone and agricultural and aquatic cultivation area, the implementation of phase out, restriction and substitution of EDCs.

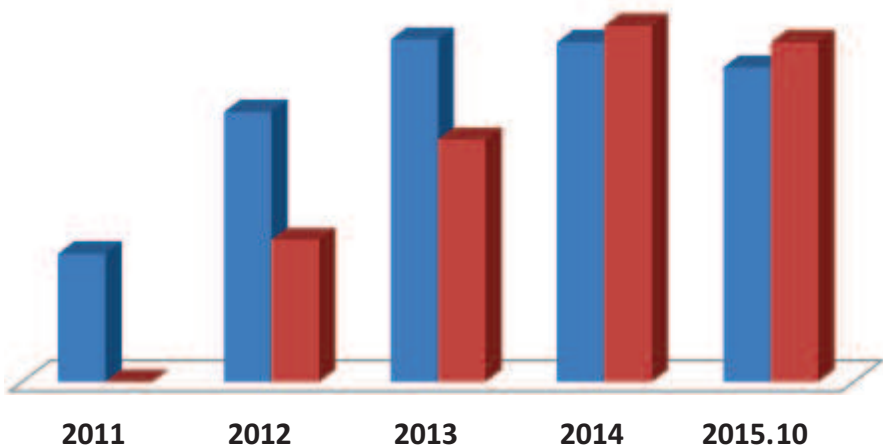


2.The environmental management on new chemicals

➤ Registration approval

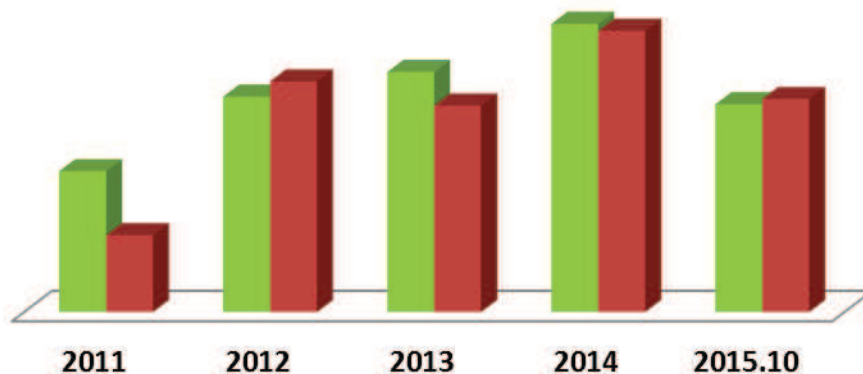
常规申报审批情况

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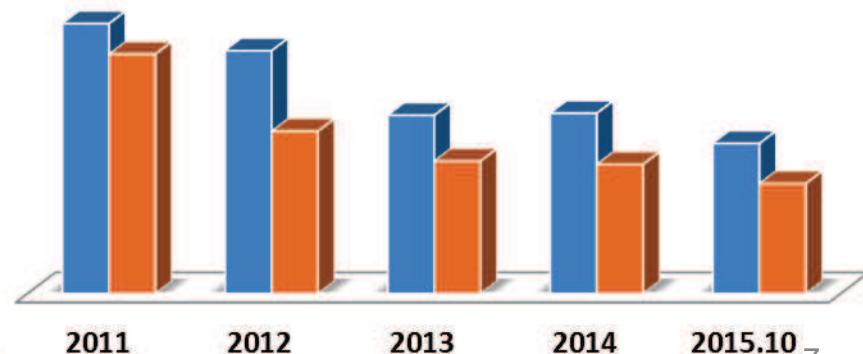
简易申报基本情形审批情况

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简易申报特殊情形审批情况

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2.The environmental management on new chemicals

- The guidance of new chemical declaration and registration is under revision.



《 The guidance of new chemical declaration and registration 》 (Exposure draft)



"the guidance (revised)" is published on MEPSCC website for public on June 25 to July 31,2015.



Seminar on the guidance revision was hold in Beijing on 9th July (120 representatives present).



2.The environmental management on new chemicals

- The guidance of new chemical declaration and registration is under revision.

Major changes of the revision

1. Perfect the policy, strengthen the management
2. Simplify the procedures, improve the efficiency of examination and approval
3. Data should be scientific and standardized, and relevant to management practice
4. Increase the accessories, more guidance and maneuverability



1. Perfect the policy, strengthen the management

- Clear the rights and responsibilities of the declaration files.
- The amount of the polymer simple declaration is not limited; the polymer simple declaration does not apply to the degradative, unstable or water absorbent polymers.
- Increase the simple declaration of new chemical substance registration cancellation.



2. Simplify the procedures, improve the efficiency of examination and approval

- Refine the change situation and adjust the change program: according to the change of the environmental risk, take the expert review and report of environmental protection approved changes, or changes for the record.
- Each activity report: for the key environmental management hazardous new chemical, only need to report when more than 10 kg is transferred by different processing users.
- The annual report: a lot report information is simplified.



3. Data should be scientific and standardized, and relevant to management practice

- The rules for the validity of the test report is defined by the time of the report and the updating of the test method.
- China local creatures are designated as testing varieties, such as gobiocypris rarus, activated sludge.



3. Data should be scientific and standardized, and relevant to management practice

- The regulations requirement on physical and chemical mapping data has been clear
- The data requirements on health toxicology primary acute toxicity, secondary 90 days repeatedly infected poison toxicity, mutagenic data, generation of dynamics and level 4 carcinogenicity have been adjusted.
- The requirement on ecological toxicology level 2 fish 14 days toxicity test has been cancelled; Level 4 increased line vermiformis breeding test or earthworm breeding test.
- Some exemption clauses have been adjusted, such as the oxidation, autoignition temperature, acute toxicity, repeated infections, mutagenic, acute toxicity, chronic toxicity, aquatic acute toxicity, and activated sludge respiration inhibition toxicity.



3. Data should be scientific and standardized, and relevant to management practice

Risk Assessment Report

- Latest revision of national standard applied, the "chemical classification and labelling standard (GB series 30000)
- Illustrates the application of the quantitative evaluation and qualitative evaluation
- the risk assessment requirements of the series notified chemicals have been clear
- Increased the risk assessment report format requirements, as a guide in the attachment
- Review report content increases the PBT and vPvB chemicals



4. Increase the accessories, more guidance and maneuverability

- Increased chemical application code table
- “the new chemical each activity report form”, “the new chemical annual report form”, “the registered new chemical five years practical activity report form” have been redesigned, as the guide in the attachment.



3. The environmental management on existing chemicals

1. Chinese white paper on chemical management policy
2. Environmental and health risk assessment of existing chemicals
3. Investigation and evaluation on EDCs
4. Hazardous chemical environmental management registration
5. Import and export management on toxic chemicals



1.Chinese white paper on chemical management policy

- Taking SAICM as the blueprint, combined with the international advanced management experience, to carry out the top design, and compose the **Chinese white paper on chemical management policy**.
- Propose **overall mentality and roadmap** for China's chemical management, build Chinese chemical management policy **system basic framework**, and perfect the **current chemical management mechanism**.
- **Progress:** White paper is preliminary formed (draft).



2. Environmental and health risk assessment of existing chemicals

- The environmental and health risk assessment of existing chemicals was launched by MEP and other ministries, and on this basis, **the National Priority Control Chemicals List** was published.
- The elimination, restriction and substitution of chemicals with high environmental and health risk on the list are carried out, risk prevention and control strategy is applied in production, use, consumption and waste disposal.



2. Environmental and health risk assessment of existing chemicals

➤ Progress :

1. Work plan for the environmental and health risk assessment of existing chemicals
2. Technical scheme for the environmental and health risk assessment of existing chemicals
3. Coordination mechanism is preliminary formed between ministries
4. The first batch of existing chemical hazards screening is on conduction



3. Investigation and evaluation on EDCs

- Recent (2015-2017) : Before the end of 2017, with an emphasis on EDCs, **organize usage survey and sensitive area monitoring and evaluation in key industries**, screen the priority list of EDCs, implement risk prevention and control measures, such as elimination, restrictions, and substitution.
- mid-and-long term (2018-) : EDCs as one of the key in the existing chemical risk assessment and risk prevention and control work.



3. Investigation and evaluation on EDCs

➤ Progress :

1. General work plan for the risk prevention and control of EDCs
2. Chemical usage survey plan and the questionnaire in key industries
3. Work plan for the monitoring and evaluation of EDCs in key area



4. Dangerous chemical environmental management registration

- Actively promote the registration, carry out registration and pilot training
- Combined with the problems existed in current work and local requirements,, the amendment to the “guidance on the hazardous chemical environmental management registration (try out)” (NO. 22 Order) is launched in 2015.
- **Progress :**
 - Research and draft the amendments to the "guidance" and the relevant supporting documents (registration, evaluation guide)
 - The“guidance” (draft) and it supporting documents are currently soliciting opinions from the local environmental protection departments at various levels and the social public.



4. Dangerous chemical environmental management registration

Ideas of revision :

1. Clear the legislative purpose and the nature of the registration
2. Refine the scope of registration
3. Simplify the registration procedures, cancel the registration certificate
4. Simplify the registration materials, simplify the registration application form
5. Adjust the risk assessment requirement and method
6. Weaken the regulatory requirements



5. Import and export management on toxic chemicals

- A toxic chemicals import and export registration for examination and approval system reform is launched.
- According to the convention requirements and domestic regulations, the import and export management list is continuously revised.
- Currently executing catalog: the China strictly import and export of toxic chemicals list (2014) "(162 chemicals)," the import prohibition goods list (6th) "and" the export prohibition goods directory (3rd).



5. Import and export management on toxic chemicals

- **2014 annual import and export**

- **Import : Imported chemicals of 24 categories**

Ethylene chloride, Acrylonitrile, Tetrachloroethylene, Chloroform, Nonylphenol, Nonylphenol ethoxylates contained organic surface active agent, methylene chloride, etc.

- **Export: Exported chemicals of 34 categories**

Aniline, methylene chloride, sodium cyanide, 2, 4-diamino toluene, carbon disulfide, acrylamide, trichloroethylene, arsenic trioxide, etc.

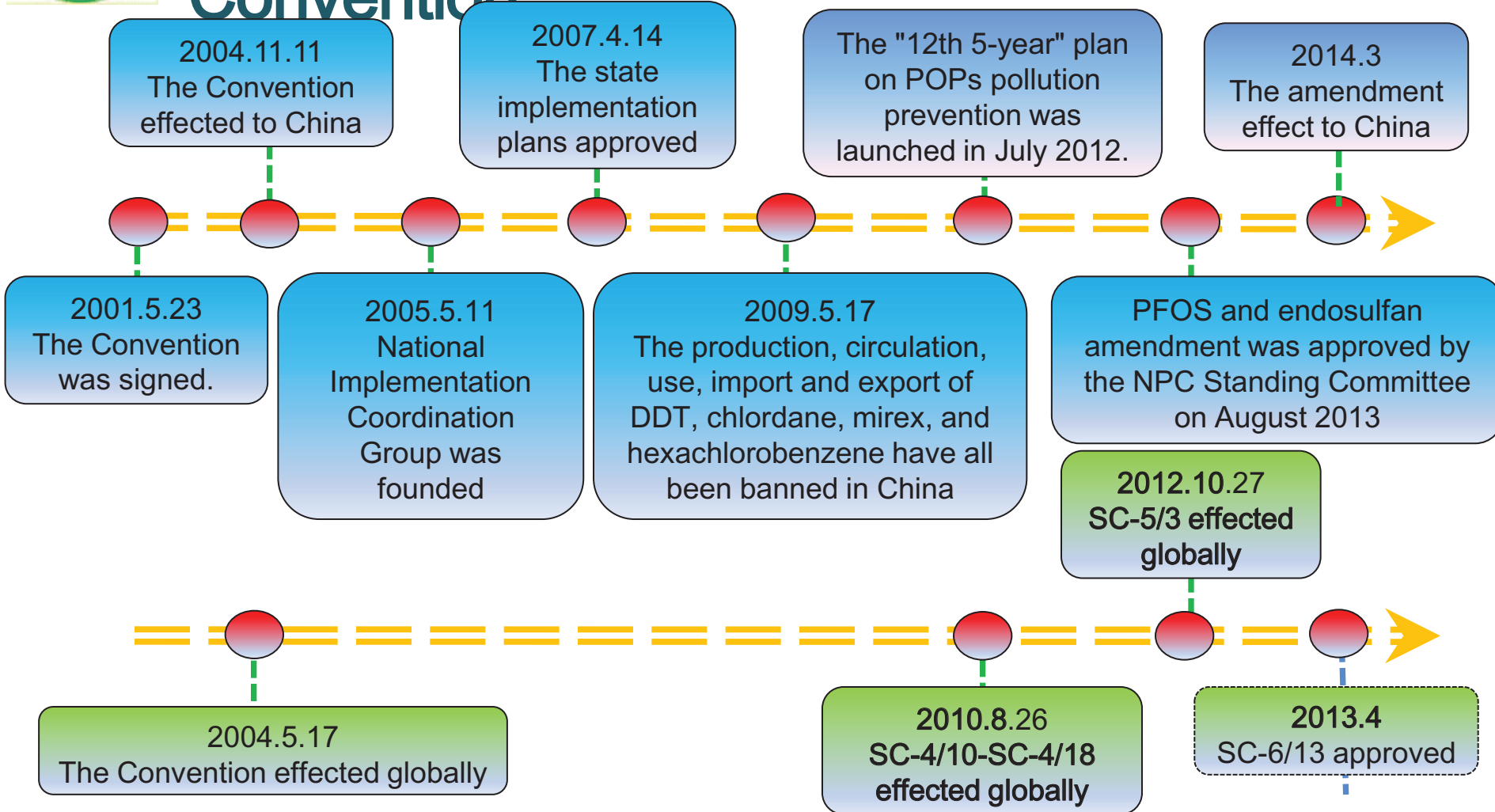


4. Implementation of Conventions

1. Stockholm Convention(POPs Convention)
2. Minamata Convention



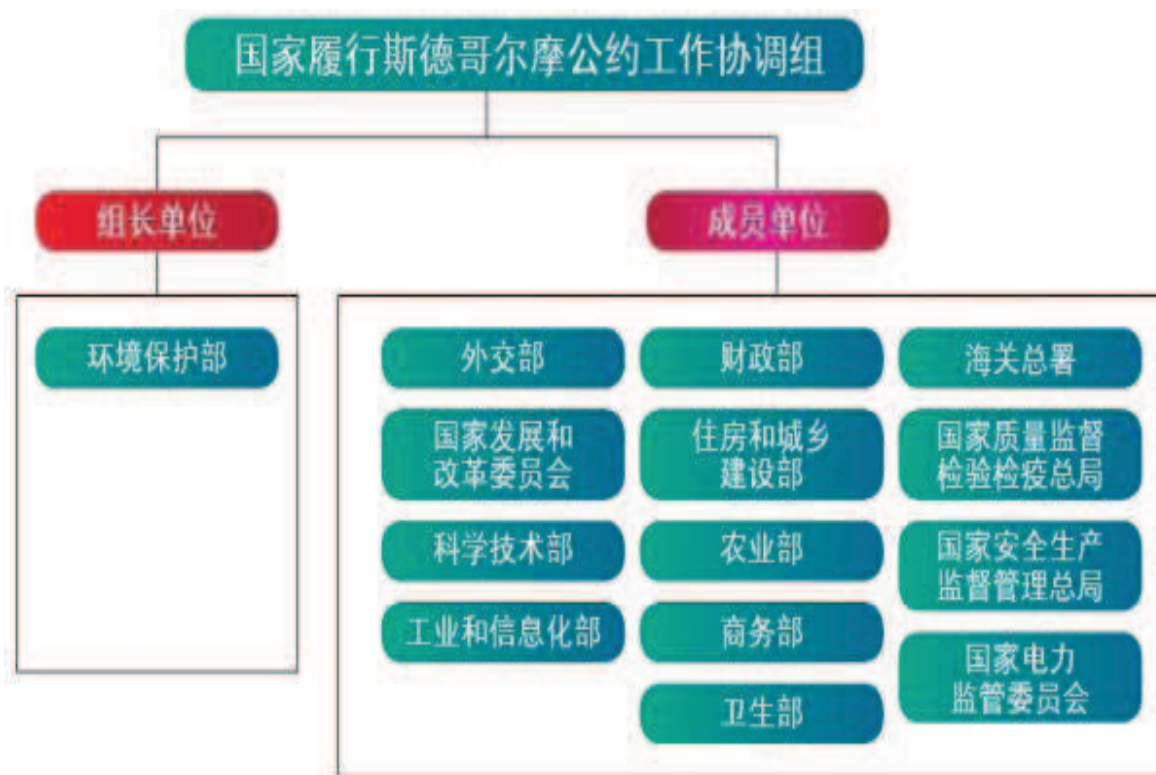
1. The implementation of POPs Convention





1. The implementation of POPs Convention

- Set up coordination mechanism, promote the implementation jointly



9 coordinator meetings



22 liaison meetings



4 expert committee meetings



- The “12th 5-year” plan on POPs pollution prevention was launched in 2012, by MEP and 11 other ministries, and objectives were set up.





1. The implementation of POPs Convention

- Policies and regulations promulgated, constraint mechanism established
- Announcement & Prohibition
 - ✓ Announcement on “the production, circulation, use, import and export of DDT, Chlordanes, Mirex and Hexachlorobenzene has been banned in China.” was published on April 16th, which means that China has achieved the periodic implementation goal on the elimination of pesticide-like POPs.
 - ✓ The POPs amendment was approved to effect to China on March 25th, 2014 by MEP and 11 other ministries.





1.The implementation of POPs Convention

- Policies and regulations promulgated, constraint mechanism established
- Environmental and industrial policies promulgated
 - ✓ The "guidance on strengthen the prevention and control of dioxin " was jointly issued by 9 ministries on October 19th, 2010.
 - ✓ The requirements on elimination, reduction and control of POPs were concluded in the catalogue of industrial structure adjustment (2011).
 - ✓ On October 17, 2011, the state council issued “the opinions on strengthening the environmental protection work”, which request to strengthen the supervision and administration of POPs pollution in key industries.



1. The implementation of POPs Convention

➤ Policies and regulations promulgated, constraint mechanism established

- Issue the POPs emission permit requirements
 - ✓ Urban sewage treatment plant pollutant discharge standard
 - ✓ Hazardous waste incineration pollution control standards
 - ✓ PCBS waste pollution control standards
 - ✓ The pulp paper industry wastewater discharge standard
 - ✓ Steel industrial air pollutants emission standards
 - ✓ Iron and steel sintering, pelletizing industrial air pollutants emission standards
 - ✓ Cement kiln collaborative treatment of solid waste pollution control standard
 - ✓ Living garbage burning pollution control standards
- Regulations for the POPs content limit in environment, food and drinking water
 - ✓ The surface water environmental quality standards
 - ✓ Sea water quality standard
 - ✓ Marine sediment quality
 - ✓ Domestic and drinking water hygiene standards
 - ✓ Maximum residue limits for pesticides in food
 - ✓ Contaminants in food
 - ✓ Soil environmental quality standards



1. The implementation of POPs Convention

- Policies and regulations promulgated, constraint mechanism established

- **Technical specifications and guidelines published**

- ✓ 4 environmental standards specify the dioxin test methods
- ✓ 2 national demonstration projects put forward the related technical requirements on POPs
- ✓ 2 best feasible technical guidance has been clear about the dioxin
- ✓ 11 industry technical engineering specification put forward POPs related technical requirements



1.The implementation of POPs Convention

- **Consolidate the implementation base, and improve the management ability**
 - The dynamic data collection is realized by applying the statistics system.
 - Monitoring system is initially built by establishing POPs monitoring laboratories.
 - Improve the implement ability, and enhance the local management ability.
 - Conduct scientific research, and promote the POPs emission reduction technology in China.
 - POPs implementation technology transformation center is built to promote technology transfer in key areas.
 - Management Training for POPs related enterprises, enhance the enterprise society responsibility consciousness and ability to implement.



1.The implementation of POPs Convention

➤The next steps

- Update the state implementation plan
- Continue to improve and promote the implementation of relevant policies, regulations and standards
- Initiate new POPs reduction and risk control work
- Control dioxin emissions growth trend in key industries
- Promote the harmless treatment of POPs contaminated site and waste
- Strengthen the research on monitoring and the application of new technology.



2. Minamata Convention



2. The Implementation Of Minamata Convention

Scope of Convention Jurisdiction that China involves in

	Convention Jurisdiction	The control object that China involves in
1	Mercury supply and trade	primary mercury production
		Mercury recycling: mercury from waste catalyst recovery
2	Mercury-added products	The production of electric light source, battery, thermometers and blood pressure monitor .
3	Mercury-involving processes	Vinyl chloride monomer production: mercury as catalyst in the production of polyvinyl chloride (PVC)
4	Atmospheric mercury emission	Coal-fired power plants, coal-fired boiler, non-ferrous metals (lead, zinc, copper, gold) production, cement production, waste incineration, etc .
5	The release of mercury to water and soil	The release of mercury in production and use .
6	Mercury -containing waste	Temporary storage of mercury .
		The disposal of waste mercury-containing catalyst and waste hydrochloric acid.
		The recycling disposal of mercury-containing waste products .
		The disposal of mercury-containing sludge and waste acid generated from the flue gas purification .
7	Contaminated site	Waste mercury method of caustic soda electrolytic cell, mercury mountain tailings, etc



2. The Implementation Of Minamata Convention

(1) primary mercury production

- No policy measures on primary mercury production have been issued, and the normal drilling and production of the primary mercury keep going on.
- China lacks mercury, primary mercury manufacturing enterprises are decreasing , basically no new enterprises in recent years.
- Only a few enterprises still have a normal production of primary mercury selecting and smelting, but there are also enterprises with a mining license but no actual mining.



2. The Implementation Of Minamata Convention

(2) Mercury-added products

- MEP has issued a policy to strengthen the mercury pollution prevention and control of main mercury-added products and mercury-added related raw materials industry: it is prohibited to new-build, change and expand; elimination in a limited date; encourage the mercury-free technology development and applications. strictly control the use of mercury and its discharge, etc.
- **Battery:** Mercury consumption remarkably decreased. The button alkaline manganese battery will be all mercury-free after 2015, and the mercury content of button type zinc silver oxide or zinc air battery has been under the convention requirement.
- **Electric light source:** Mercury consumption drops year by year. Average single mercury content of ordinary lighting compact and straight tube fluorescent has been under the convention requirement, and it will be further reduced with the popularization and application of technologies such as mercury solidification and self-dosing, and the fluorescent mercury levels limit standard is under revision.
- **Thermometers and blood pressure:** the number of enterprises and mercury consumption are in decline, and the range of alterprimary use is gradually enlarged.



2. The Implementation Of Minamata Convention

(3) Mercury-involving process - PVC production by calcium carbide method

- MEP has issued an inform to strengthen the mercury pollution prevention and control in the production of PVC by calcium carbide method and related industries, and carried out the supervision and inspection on mercury pollution prevention
- It is prohibited to construct new project of PVC production by calcium carbide method using high mercury catalyst.
- The usage proportion of low-mercury catalyst rises year by year. By the end of 2015, PVC production by calcium carbide method will all adopt low-mercury catalyst.
- Strict management and control of the mercury emissions and release during production processes.
- All waste mercury catalyst will be recycled and disposed by qualified enterprises.
- Encourage the mercury-free catalyst research and development.



2. The Implementation Of Minamata Convention

(4) Atmospheric mercury emission

- Among 5 Convention controlled categories of emission source, the atmospheric mercury emission standards for coal-fired power plant and smelting of copper, lead and zinc have been revised, and other emission standards are under formulation or revision.
- The atmospheric mercury collaborative reduction technology has been applied in some coal-fired power plants for demonstration, and part of the lead and zinc smelting enterprises have carried out the technological renovation and actively adopt new technology to reduce atmospheric mercury emission.



2. The Implementation Of Minamata Convention

(5)Mercury -containing waste and Contaminated site

- Mercury-containing waste has been listed in the "national hazardous waste list", the transport, storage, utilization and disposal of which has to agree to hazardous waste management.
- Action plan of soil pollution prevention is now in formulation, mercury and other heavy metal pollution is the key of the prevention and control of soil pollution.



2. The Implementation Of Minamata Convention

China's progress of Convention approval

- The Minamata Convention was signed by China on October 2013.
- Social and economic impact analysis report on the implementation of Minamata Convention in China was completed.
- Now has entered the stage of coordination between ministries.
- Next, it will be submitted to the National People's Congress for approval.



2. The Implementation Of Minamata Convention

➤ The implementation requirements

- Make policies, regulations and standards
- Strengthen the development and promotion of alterprimary technologies and atmospheric mercury emission reduction technology
- Strengthen the monitoring, information collection, and staff capacity building, and improve the mercury pollution prevention and control ability
- Make state implementation plan, formulate mercury emissions inventory, establish the the implementation mechanism
- Raise funds for the implementation both at home and abroad, and strengthen multilateral and bilateral international cooperation



2. The Implementation Of Minamata Convention

➤ Main work to be done at home

(1) The primary mercury production

- Restrictions on new primary mercury mines and phase out existing ones gradually.
- Tracking and managing the primary mercury flow, limit the use of primary

(2) Mercury-added products

- Make policy on the elimination of mercury-added products.
- Formulate mercury content limit standards for mercury-added products.
- Accelerate the development and demonstration of low mercury/mercury-free alterprimarys.



2. The Implementation Of Minamata Convention

(3) PVC production by calcium carbide method

- Supervision on the implementation of mercury pollution prevention and control policies.
- Promotion on low-mercury catalyst, and reduce unit PVC product mercury consumption.
- Design BAT/BEP guidelines for PVC by calcium carbide method industry, and reduce the use and emissions of mercury.
- Speed up the mercury-free catalyst development and demonstration.



2. The Implementation Of Minamata Convention

(4) Atmospheric mercury emission

- Formulate relevant emission standards.
- Design atmospheric mercury emission monitoring method and the technical specification, and perfect the mercury emission factor.
- Design atmospheric mercury emission BAT/BEP guidances, and carry out application demonstration
- Improve the ability of atmospheric mercury monitoring, strengthen environmental supervision.
- Development and promotion of atmospheric mercury emissions reduction technologies



2. The Implementation Of Minamata Convention

(5) Mercury -containing waste

- Improve mercury waste identification standard, and refine the list of hazardous waste.
- Strengthen the recycling and disposal of mercury-added waste.
- Make the guidance on the disposal and use of mercury-containing waste, and carry out the demonstration project.

(6) Contaminated site

- Carry out contaminated site investigation, identification and assessment.
- Design the guidance on contaminated sites management.
- Promote the development and demonstration of contaminated site remediation technology.



4. Focuses in the future

→ implementation of Action Plan On Water Pollution Prevention

→ Implementation of environmental management registration and PRTR of hazardous chemicals

→ Promote the chemical environment legislation, strengthen the chemical management ability



Thank you !

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