为了更加和谐、文明、无 POPs 危害的明天……

For A More Harmonious, Prosperous and POPs-free Future

中国 POPs 履约在行动

POPs Action in China

中华人民共和国环境保护部
环境保护对外合作中心
2009 年 7 月

Ministry of Environmental Protection of the People's Republic of China
Foreign Economic Cooperation Office
July. 2009

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前言

持久性有机污染物（POPs）是上世纪人类大量生产使用合成化学品所伴生的产物，由于其独特的环境持久性、生物蓄积性、长距离迁移能力和高生物危害性，POPs 在历史上导致了一系列触目惊心的污染事件（如：日本米糠油事件、越南橙剂战事件、意大利塞维索事件……），造成巨大的生命和财产损失，成为当今一个新的全球性环境热点问题。为避免环境和人类健康免受 POPs 危害，国际社会于 2001 年 5 月共同签署了《关于持久性有机污染物的斯德哥尔摩公约》（简称“《斯德哥尔摩公约》”或“公约”），决定全球携手共同对付 POPs 这一顽敌。中国是较早签署和批准《斯德哥尔摩公约》的发展中国家，2004 年 11 月 11 日，公约对中国生效。

本着对人民健康和全球环境负责的态度，中国政府高度重视 POPs 问题，专门成立了由国家环境保护部牵头、13 个相关部委参加的国家履行斯德哥尔摩公约工作协调组（简称“国家履约工作协调组”），并成立了专门的履约办公室作为日常办事机构。进入 21 世纪以来，中国在清单调查、战略编制、机构协调、能力加强、政策改进、标准完善、案例研究、技术示范、意识提高等各方面开展了一系列卓有成效的行动，向着淘汰、削减和控制 POPs 的目标不断迈进。2007 年 4 月 14 日，国务院批准了《中华人民共和国履行〈关于持久性有机污染物的斯德哥尔摩公约〉的国家实施计划》（简称“《国家实施计划》”）。2007 年 4 月 18 日，中国政府向公约秘书处递交《国家实施计划》，标志着中国政府向国际社会正式承诺将全面履行公约规定的各项义务。2007 年 7 月 3 日，《国家实施计划》启动，向国内外利益相关方通报了《国家实施计划》的具体内容和进程。中国的实践，为回答“发展中国家如何履行《斯德哥尔摩公约》”的问题进行了积极有益的探索。

但是必须清醒地看到，中国是 POPs 问题最为严重的国家之一。“冰冻三尺，非一日之寒”，POPs 履约对于发展中的中国还是一个新课题，其涉及面广、技术性强、资金需求大、前期基础弱，要彻底解决 POPs 问题任重而道远。中国 POPs 履约的大幕才刚刚拉开，问题和挑战正以险峻的姿态横亘于前。但挑战同时孕育着机遇，并且机遇大于挑战。在当前中国正深入贯彻落实科学发展观、继续全面建设小康社会的关键时期，积极推进 POPs 履约工作对于加强能源资源节约和生态环境保护、增强可持续发展能力、建设生态文明将具有非常重要的意义。

全球环境问题需要全球携手解决。随着《国家实施计划》的全面启动，中国 POPs 履约工作正在广度和深度上不断推进。欢迎各国内外各相关机构、广大专家学者基极参与中国 POPs 履约行动，相互帮助、协力推进，共同呵护人类赖以生存的地球家园，缔造更加和谐、文明的世界！

Foreword

Persistent organic pollutants (POPs) are synthetic chemicals widely used by human beings since last century. Due to their distinctive characteristics of environmental persistence, bio-accumulation, long-range transport and high biotoxicity, POPs caused a series of appalling pollution accidents in history (such as: the Rice Bran Oil Contamination Incident in Japan, the Agent Orange Incident in Vietnam and the Seveso Incident in Italy, and etc.), which resulted in tremendous losses of lives and properties, thus making POPs a new hot global environmental issue. In order to prevent the environment and human health from POPs hazards, the international community jointly signed the Stockholm Convention on Persistent Organic Pollutants in May 2001, deciding to join hands to globally cope with the tenacious enemy of human beings---POPs. China was one of the first countries that signed the Stockholm Convention, which entered into force in China from November 11, 2004.

To protect human health and global environment, the Chinese government paid great attention to the POPs issue. The National Coordination Group for the Implementation of Stockholm Convention and the Convention Implementation Office (CIO) are set up as daily operation organs. Since the 21st century, China has carried out a series of effective measures on inventory investigation, strategy development, capability enhancement, policy establishment, technical demonstration, awareness raising, and etc., so as to realize the objectives of reducing, controlling, and eliminating POPs step by step. On April 14, 2007, the State Council approved the National Implementation Plan of China for the Implementation of Stockholm Convention on Persistent Organic Pollutants (NIP). On April 18, 2007, the Chinese government submitted the NIP to the Conference of Parties, which marks the Chinese government's commitment for its fulfillment of the obligations prescribed by the Convention. With the official launching of NIP on July 3, 2007, the established goals, strategies and action plans were announced to the world.

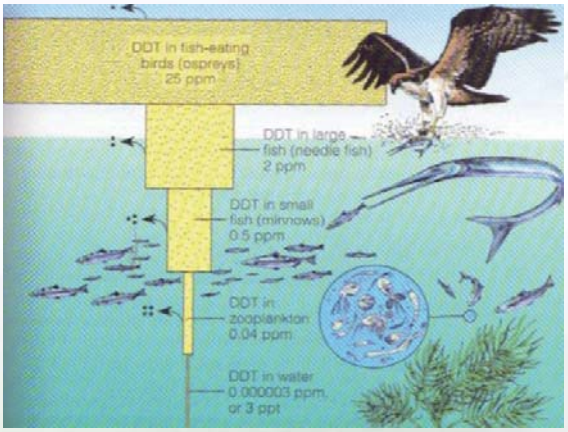
POPs Convention implementation is a new subject for developing countries, including China. Due to the wide impacts, strict technical requirements, huge financial need and weak work basis, there remains a long way to go before the POPs problem is thoroughly resolved. Yet challenges also conceive opportunities, which actually surpass challenges. The active promotion of POPs Convention implementation is of great contribution in improving energy and resource saving as well as ecological environment protection, enhancing the capacity of sustainable development and building ecological civilization.

Global problem, global response. China's POPs action has kept on progressing. All international organizations, bilateral partners and international experts are welcome to actively participate in the work, which is full of opportunities and challenges. With the best wish for a more prosperous future for the human beings, let us help each other to cherish and protect the home on which we relies and to create a more harmonious and flourishing future which is free from POPs!

POPs 特性

POPs，Persistent Organic Pollutants，是持久性有机污染物的英文缩写，它有四个特点：第一是持久性，在环境中很难降解；第二是生物蓄积性，能在生物体内富集；第三是迁移性，可以输送到远离排放源的地点；第四是毒性，可危害人类健康和对环境产生不利影响，某些 POPs 还具有致畸、致癌和致突变的“三致”作用

安大略湖内多氯联苯的生物放大作用
PCB Bio-magnifying phenomenon in Ontario lake



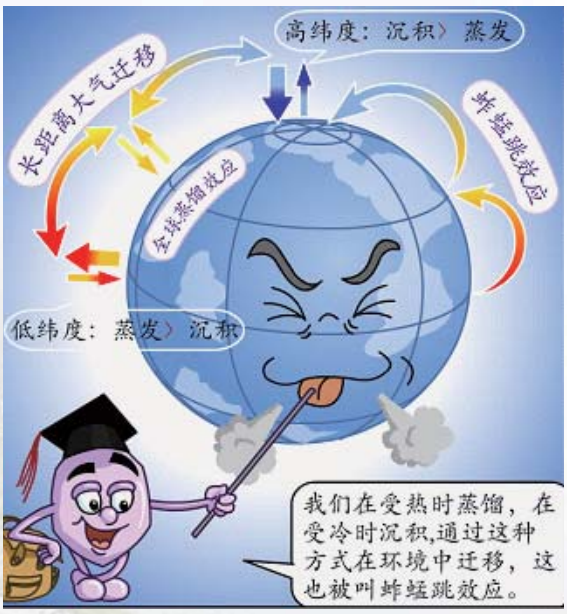
POPs 的生物蓄积性
POPs bioaccumulation

POPs 的远距离迁移性
POPs long distance migration and transportation

POPs Properties

POPs, the English acronym for Persistent Organic Pollutants, possess four properties:

1. It resists degradation in environment;
2. It is bioaccumulative in organism through food chain;
3.It can be transported and deposited far from their places of releases;
4. It's toxic, causing adverse impacts to human health and the environment. Some of the POPs even possess teratogenic, carcinogenic, mutagenic properties.



POPs 的全球迁移示意图
POPs global migration

日本米糠油事件中 PCBs 受害者
PCBs victims in the rice bran oil incident in Japan

滴滴涕导致鸟类壳变薄无法孵化
DDT caused thinning of birds egg shell to disable incubation

暴露途径

- 食用被 POPs 污染的食物；
- 吸入被 POPs 污染的空气；
- 饮用被 POPs 污染的水；
- 接触被 POPs 污染的土壤；

透过胎盘或通过哺乳进入胎儿或婴儿体内，可影响到几代人的健康，对人类生存繁衍可持续发展构成重大威胁。

Exposure Channels

▲ POPs contaminated food intake

▲ POPs polluted air inhalation

▲ Drinking POPs contaminated water

▲ Close contact with POPs contaminated soil

POPs enter fetus through placenta and infant through breast-feeding, thus bringing harm to people's health for generations. POPs pose great threat to human existence, reproduction and sustainable development.

POPs 名单

斯德哥尔摩公约受控物质清单是开放的。截止到 2009 年 5 月 8 日，已经列入斯德哥尔摩公约受控物质清单的共有 21 类物质，其中 12 类为首批受控物质，9 类为新增受控物质。

斯德哥尔摩公约受控物质清单

所处阶段	序号	化学品名称	类别				
			公约附件 A		公约附件 B		公约附件 C
			杀虫剂	工业化学品	杀虫剂	工业化学品	副产品
首批受控物质	1.	滴滴涕	√				
	2.	艾氏剂	√				
	3.	氯丹	√				
	4.	狄氏剂	√				
	5.	异狄氏剂	√				
	6.	七氯	√				
	7.	灭蚁灵	√				
	8.	毒杀芬	√				
	9.	六氯苯		√			√
	10.	多氯联苯		√			√
	11.	多氯代二苯并 - 二恶英					√
	12.	多氯代二苯并 - 呋喃					√
新增受控物质	13.	林丹（γ 体六六六）	√				
	14.	开蓬（十氯酮）	√				
	15.	α 体六六六	√				
	16.	β 体六六六	√				
	17.	六溴联苯		√			
	18.	五溴代二苯醚				√	
	19.	全氟辛烷磺酸类化合物			√	√	
	20.	八溴二苯醚（商用混合物）		√			
	21.	五氯苯		√			

POPs List

The list of chemicals to be controlled in the Stockholm Convention is open for addition. Until May 8, 2009, there are total 21 kinds of chemicals listed in the Stockholm Convention, among which 12 kinds of POPs are the first group to be controlled, 9 of which are newly listed chemicals to be controlled.

List of chemicals to be controlled in the Stockholm Convention

Stage	No.	Chemicals Name	Categories				
			Annex A		Annex B		Annex C
			Pesticide	Industrial Chemical	Pesticide	Industrial Chemical	UP POPs
First group of chemicals to be controlled	1.	DDT	√				
	2.	Aldrin	√				
	3.	Chorldane	√				
	4.	Dieldrin	√				
	5.	Endrin	√				
	6.	Heptachlor	√				
	7.	Mirex	√				
	8.	Toxaphane	√				
	9.	Hexacholorobenzene (HCB)		√			√
	10.	Polychlorinated biphenyls (PCBs)		√			√
	11.	Polychlorinated dibenzo-p-dioxin (PCDDs)					√
	12.	Polychlorinated dibenzofurans (PCDFs)					√
Newly listed chemicals to be controlled	13.	γ-Hexachlorocyclohexane（HCH）	√				
	14.	Chlordecone	√				
	15.	α-Hexachlorocyclohexane（α-HCH）	√				
	16.	β-Hexachlorocyclohexane（β-HCH）	√				
	17.	Hexabromobiphenyl		√			
	18.	Pentabromodiphenyl ether(PeBDE)				√	
	19.	Perfluorooctane sulfonate(PFOS)			√	√	
	20.	Commercial Octabromodiphenyl Ether		√			
	21.	Pentachlorobenzene		√			

公约义务

◆《斯德哥尔摩公约》共 30 个条款 7 个附件，包括五方面的主要义务：控制义务、常规义务、豁免条款、增列化学品审查程序、资金和技术援助机制。

◆公约要求针对上述 POPs 采取如下措施：

（1）附件 A：除豁免用途按照规定的时限生产、使用和进出口外，逐步消除此类化学品生产、使用和进出口。

（2）附件 B：除豁免用途按照规定的时限生产、使用和进出口外，允许部分不可替代应用领域生产、使用和进出口，逐步消除或限制此类化学品生产、使用和进出口。

（3）附件 C：在公约对缔约方生效两年内制定并实施旨在查明附件 C 中所列化学物质的排放和逐步采用 BAT/BEP 减少其排放行动计划；对于附件 C 第二部分所列类别中的新来源的最佳可行技术的使用，应尽快、并在不迟于本公约对该缔约方生效之日起四年内分阶段实施；对于现有各种附件 C 排放源，逐步采取 BAT/BEP 减少其排放。

（4）附件 A、附件 B 和附件 C 库存和废物：制定适当战略以便查明 POPs 库存和废物，酌情以安全、有效和环境无害化的方式管理库存，采取适当措施以确保此类废物、包括即将成为废物的产品和物品，以环境无害化的方式予以处置、收集、运输和储存，逐步减少或消除库存和废物的排放。

Convention Obligations

There are total 30 articles and 7 annexes in the Stockholm Convention, which is mainly comprised of the following five main obligations: control obligation, routine obligation, exemption article, listing chemicals review procedures, financial and technical assistance mechanism.

The Convention requires that these actions be taken on the aforementioned 12 POPs.

(1) Annex A: Except for production, use, import, and export for specific exemptions within specified time periods, gradually eliminate production, use, import and export of such chemicals.

(2) Annex B: Except for production, use, import and export for specific exemptions within specified time periods, allow production, use, import and export in some fields of application for which there are no substitutes; and gradually eliminate or restrict production, use, import and export of such chemicals.

(3) Annex C: Within two years of the date of entry into force of the Convention, develop and implement action plans to identify release of the chemicals listed in Annex C and gradually reduce their release by BAT/BEP; phase in the use of BAT for new sources in the categories listed in Part II of Annex C as soon as practicable but no later than four years after the entry into force of the Convention; and for existing release sources listed in Annex C, gradually implement BAT/BEP to reduce their release.

(4) Stockpiles and waste containing chemicals listed in Annex A, Annex B or Annex C: Develop appropriate strategies for identifying POPs stockpiles and waste; manage stockpiles, as appropriate, in a safe, efficient and environmentally sound manner; take appropriate measures so that such waste, including products and articles upon becoming waste are handled, collected, transported and stored in an environmentally sound manner; and gradually reduce or eliminate releases from stockpiles and waste.

履约机构

◆ 2003 年 9 月，中国成立了由国家环保总局（现环境保护部，下同）牵头、11 个部委组成的《国家实施计划》编制领导小组，负责审议《国家实施计划》制定过程中所涉及的国家宏观管理、法规和政策，协调部门及履约前期准备工作。

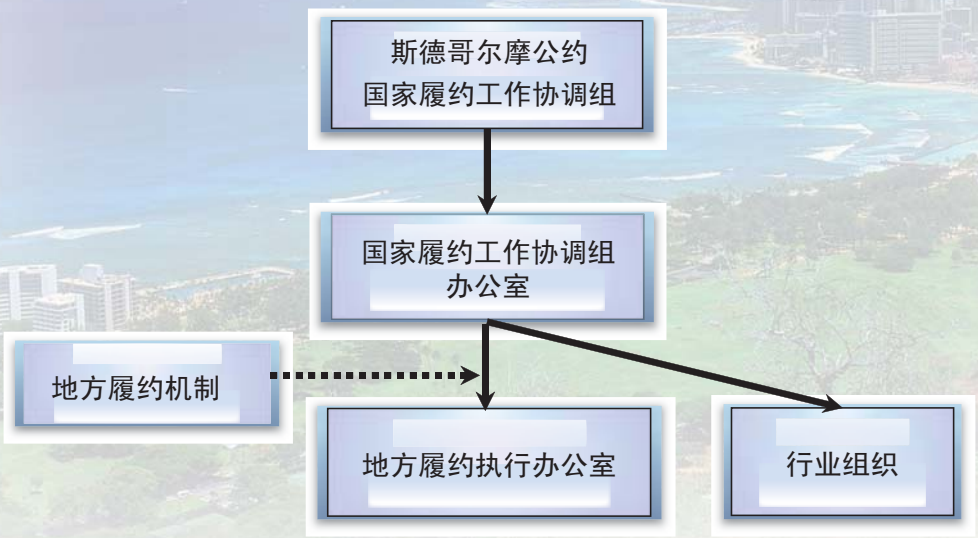
◆ 2005 年 5 月，国务院批准成立了以《国家实施计划》编制领导小组成员单位组成的“国家履行斯德哥尔摩公约工作协调组”（国家履约工作协调组）；2007 年 4 月，国务院批准质检总局和安监总局加入国家履约工作协调组。

◆国家履约工作协调组下设办公室（简称“协调办”），承担中国履行《斯德哥尔摩公约》联络点工作；负责建立和完善履约管理信息机制；负责履约活动的日常组织、协调和管理。该办公室设在环境保护部。

国家履行斯德哥尔摩公约工作协调组的组成：

组长单位：	环境保护部
成员单位：	外交部、发展改革委、科技部、财政部、住房和城乡建设部、农业部、商务部、卫生部、海关总署、质检总局、安监总局、电监会

管理结构图



Institutions for Convention Implementation

▲ In September, 2003, China established the Leading Group for the Development of National Implementation Plan for Convention Implementation consisting of 11 ministries and agencies under the leadership of the SEPA (now MEP), taking charge of reviewing the national macro-management, regulations and policies, department coordination and the preparation for the Convention implementation during the process of NIP development.

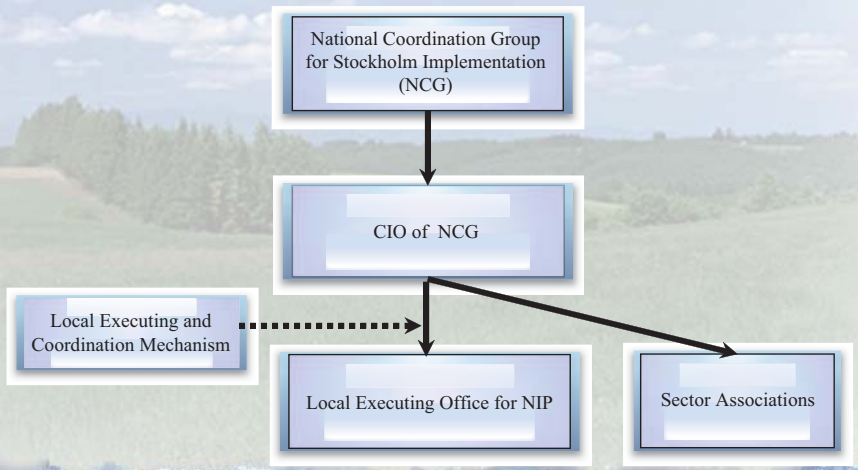
▲ In May 2005, to ensure the effective implementation of the Convention, the State Council approved the establishment of the National Coordination Group for Convention Implementation (NCG) replacing the Leading Group for NIP development. In April 2007 another two administrations were incorporated into the Group.

▲ As the daily operational office under NCG, Stockholm Convention Implementation Office (CIO) acts as the focal point for China, responsible for the establishment and operation of management information system, and the daily coordination and organization of Convention related activities. This office is located in MEP.

Composition of the NCG for Stockholm Convention Implementation

Leading agency	Ministry of Environmental Protection
Members	Ministry of Foreign Affairs, National Development and Reform Commission, Ministry of Science and Technology, Ministry of Finance, Ministry of Housing and Urban-Rural Construction, Ministry of Agriculture, Ministry of Commerce, Ministry of Health, General Administration of Customs, General Administration of Quality Supervision, General Administration of Security Supervision and State Electricity Regulatory Commission

Organizational Diagram



环境保护部副部长张力军出席 2009 年 3 月 27 日召开的国家履约工作协调组第四次会议暨专家委员会第一次会议并致辞
Vice Minister of MEP Mr. Zhang Lijun addressed the forth NCG Meeting, Mar. 27,2009

重庆市斯德哥尔摩公约履约领导小组于 2006 年 11 月 29 日成立
Establishment of Chongqing Executing and Coordination Group for NIP

国家履行斯德哥尔摩公约工作协调组办公室 LOGO
LOGO for CIO of NCG

环境保护部 POPs 公约履约办公室是协调组的日常办事机构
CIO of MEP is the daily operation organ of the NCG

履约之路

关键事件

- 2001 年 5 月 23 日，中国政府签署《斯德哥尔摩公约》
- 2004 年 6 月 25 日，第十届全国人民代表大会常务委员会第十次会议批准公约
- 2004 年 8 月 13 日，中国政府向公约秘书处提交核准文件
- 2004 年 11 月 11 日，公约对中国生效，并适用于香港特别行政区和澳门特别行政区
- 2007 年 4 月 14 日，国务院批准《国家实施计划》
- 2007 年 4 月 18 日，《国家实施计划》报送到公约秘书处
- 2007 年 7 月 3 日，《国家实施计划》发布并启动实施
- 2008 年 7 月 10 日，中国政府向公约秘书处提交不再延长滴滴涕、氯丹、灭蚁灵及六氯苯生产和使用特定豁免的通告
- 2009 年 4 月 16 日，环境保护部联合 10 个相关管理部门发布了公告，宣布自 2009 年 5 月 17 日起，禁止在我国境内生产、流通、使用和进出口滴滴涕、氯丹、灭蚁灵及六氯苯（紧急情况下用于病媒防治的滴滴涕用途除外）

Snapshot

Key Events

▲ The Chinese government signed the Stockholm Convention on May 23, 2001.

▲ The Tenth Session of the Standing Committee of the Tenth National People's Congress made a resolution to ratify the Stockholm Convention on June 25, 2004.

▲ The Chinese government submitted approval documents to the Secretariat of the Convention on August 13, 2004.

▲ The Convention entered into force to China, which also applied in Hong Kong Special Administrative Region and Macao Special Administrative Region on November 11, 2004.

▲ The State Council approved the National Implementation Plan on April 14, 2007.

▲ The NIP was formally submitted to the Conference of the Parties on April 18, 2007.

▲ The NIP was officially launched on July 3, 2007.

▲ The notification on no extension of the specific exemptions on production and use of DDT, Chlordane, Mirex and HCB was submitted by Chinese government to the Convention Secretariat on July 10th, 2008.

▲ MEP, jointly with 9 other relevant ministries and administrations issued the ban on April 16th, 2009, on production, distribution, use, import and export of DDT, Chlordane, Mirex and HCB in China starting from May 17th, 2009 (except for DDT usage under emergency circumstances for disease vector control).

重要事件

时 间	事 件
1999 年 9 月	环保总局牵头的跨部门 POPs 技术协调和谈判小组成立。该小组参加了历次政府间谈判委员会会议（INC1 ～ 7）
2001 年 5 月 23 日	在《斯德哥尔摩公约》外交全权代表大会上，中国政府代表团团长、环保总局原副局长祝光耀代表中国政府签署了公约
2001 年 7 月 12 日	意大利政府资助的《中国削减和淘汰杀虫剂类 POPs 战略》项目启动，这是中国在履约筹备期的第一个国际合作项目
2002 年 10 月	国家领导人对 POPs 工作作出重要指示，要求环保总局会同有关部门早谋对策
2003 年 4 月 15 日	环保总局斯德哥尔摩公约履约领导小组第一次会议召开，原副局长汪纪戎主持会议并宣布“国家环保总局 POPs 履约筹备办公室”成立
2003 年 9 月	由环保总局牵头、11 个相关部委参与的《国家实施计划》编制领导小组成立
2004 年 2 月 13 日	环保总局和世界银行在京联合召开斯德哥尔摩公约履约示范项目合作伙伴融资磋商会，研讨建立合作伙伴关系
2004 年 3 月 25 日	“国家环保总局 POPs 履约筹备办公室”更名为“国家环保总局 POPs 履约办公室”
2004 年 6 月 25 日	十届人大常委会第十次会议批准《斯德哥尔摩公约》
2004 年 8 月 13 日	中国政府向公约秘书处提交《斯德哥尔摩公约》核准文件
2004 年 9 月 21 日	履约办和联合国工发组织联合召开了中国实施《斯德哥尔摩公约》能力建设及国家实施方案编制项目启动会
2004 年 11 月 11 日	《斯德哥尔摩公约》对中国生效
2005 年 4 月	国务院批示成立由环保总局牵头，11 个相关部门共同组成的国家履行斯德哥尔摩公约工作协调组，协调组办公室设在环保总局
2005 年 5 月 2–6 日	中国政府代表团参加《斯德哥尔摩公约》缔约方大会第一次会议，会议推举中国派专家担任最佳可行技术 / 最佳环境实践（BAT/BEP）专家组联合主席
2005 年 5 月 27 日	全球第一个 POPs 履约示范项目——中国多氯联苯管理与处置示范项目获得 GEF 理事会批准
2006 年 4 月 –9 月	中国履行斯德哥尔摩公约《国家实施计划》三次区域座谈会相继召开，征求各利益相关方对 NIP（草案）的意见
2006 年 5 月 1–5 日	中国政府代表团参加《斯德哥尔摩公约》缔约方大会第二次会议
2007 年 1 月 24 日	国家履约工作协调组第一次会议在北京召开，审议并原则通过《国家实施计划》
2007 年 4 月 14 日	国务院正式批准《国家实施计划》
2007 年 4 月	国务院批准质检总局和安监总局加入国家履约工作协调组
2007 年 4 月 18 日	《国家实施计划》通过中国的联络点正式报送到公约秘书处
2007 年 4 月 30 日 – 5 月 4 日	中国政府代表团参加《斯德哥尔摩公约》缔约方大会第三次会议
2007 年 7 月 3 日	国家履约工作协调组第二次会议在北京召开，审议通过《国家履行斯德哥尔摩公约工作协调组工作规则》和《国家履行斯德哥尔摩公约工作协调组专家委员会管理办法》
2007 年 7 月 3–4 日	《国家实施计划》启动会在北京召开，标志着中国 POPs 履约工作全面启动
2008 年 5 月 14 日	国家履约工作协调组第三次会议在北京召开，批准成立由 6 名院士和 31 名资深专家共计 37 人组成的国家履约工作协调组专家委员会
2008 年 7 月 10 日	中国政府向公约秘书处提交不再延长滴滴涕、氯丹、灭蚁灵及六氯苯生产和使用特定豁免的通告
2009 年 3 月 27 日	国家履约工作协调组第四次会议暨专家委员会第一次会议在北京召开，审议通过协调组 2008 年履约工作总结和 2009 年履约工作计划
2009 年 4 月 16 日	环境保护部联合 10 个相关管理部门发布公告，宣布自 2009 年 5 月 17 日起，禁止在我国境内生产、流通、使用和进出口滴滴涕、氯丹、灭蚁灵及六氯苯（紧急情况下用于病媒防治的滴滴涕用途除外）
2009 年 5 月 4–8 日	中国政府代表团参加了在瑞士首都日内瓦召开的《斯德哥尔摩公约》缔约方大会第四次会议
2009 年 5 月 17 日	我国全面停止生产、流通、使用和进出口滴滴涕、氯丹、灭蚁灵及六氯苯等杀虫剂持久性有机污染物，实现阶段性履约目标

Important Events

Date	Events
Sep. 1999	The interdepartmental technical coordination and negotiation group led by SEPA was founded, and participated in all INC meetings
May 23, 2001	The former Vice Minister of SEPA, Mr. Zhu Guangyao, on behalf of the Chinese government, signed the Convention
Jul. 12,2001	The Project on the Development of Strategy on Reduction and Phase out of POPs Pesticides in China, supported by the Italian government, was started, which was the first international cooperation project on POPs.
Oct. 10, 2002	Important instruction was made by the Chinese leaders that SEPA should take the lead to work out countermeasures together with related departments to address the issue of POPs.
Apr. 15,2003	The leading group of SEPA for implementation of the Stockholm Convention held the first meeting, and the former Vice Minister of SEPA, Wang Jirong, presided the meeting and declared that the preparation office of SEPA for POPs Convention implementation was established.
Sep. 2003	The NIP Development leading group was founded.
Feb. 13,2004	SEPA held Partnership Workshop on Co-financing China POPs Demonstration Program.
Mar. 25, 2004	The POPs Convention Implementation preparation office of SEPA was renamed as the Convention Implementation office of SEPA (CIO).
Jun. 25, 2004	The 10th Session of the Standing Committee of the Tenth National People's Congress made the resolution to ratify the Stockholm Convention
Aug. 13,2004	The Chinese government submitted the approval documents of the Stockholm Convention to the Secretariat of the Convention
Sep. 21, 2004	CIO held the project kick-off meeting for Building the Capacity of China to Implement the Stockholm Convention and Develop a National Implementation Plan
Nov. 11,2004	The Stockholm Convention entered into force to China
Apr. 2005	The State Council approved the establishment of NCG. The office of NCG was located in SEPA.
May 2-6, 2005	The delegation of Chinese government participated in COP1 and Chinese expert was elected to be the co-chairman of the expert group on Best Available Techniques and Best Environment Practices (BAT/BEP).
May 27, 2005	The first demonstration project for Convention implementation on POPs, the Demonstration Project of PCBs Management and Disposal in China, was approved by GEF. .
Apr.-Sep. 2006	Regional Consultation Meetings of NIP (draft) were held throughout China and all the relevant stakeholders were invited to the meetings.
May 1-5, 2006	The delegation of Chinese government participated in COP2.
Jan. 24,2007	The first meeting of NCG was held and the NIP has been agreed.
Apr. 2007	The State General Administration for Quality Supervision , Inspection and Quarantine and the State Administration of Work Safety were approved to join in NCG.
Apr. 14, 2007	The State Council approved the NIP
Apr. 18, 2007	NIP was formally submitted to the Conference of Parties
Apr. 30-May 4, 2007	The delegation of the Chinese government participated in COP3
Jul. 3, 2007	The Operational Rules of NCG and Establishment and Management of NCG Expert Committee were approved.
Jul. 3-4, 2007	Launching Conference on NIP was held
May 14, 2008	The third NCG meeting was convened in Beijing. Establishment of a NCG expert committee consisting of 6 academicians and 31 senior experts was approved by this meeting.
July 10, 2008	The notification on no extension of the specific exemptions on production and use of DDT, Chlordane, Mirex and HCB was submitted by the Chinese government to the Convention Secretariat on July 10th, 2008.
March 27, 2009	The fourth NCG meeting together with the first meeting of the NCG expert committee was convened in Beijing. The NCG 2008 work summary and 2009 work plan were reviewed and passed by this meeting.
April 16, 2009	MEP, jointly with 9 other relevant ministries and administrations, issued the public notice, proclaiming that production, distribution, use, import and export of DDT, Chlordane, Mirex and HCB are prohibited in China starting from May 17th, 2009 (except for DDT usage under emergency circumstances for disease vector control).
May 4-8,2009	The Chinese delegation participated in the COP4 held in Geneva, Switzerland
May 17, 2009	Production, distribution, use, import and export of the pesticide POPs, namely DDT, Chlordane, Mirex and HCB are completely banned in China, realising the stage objective of the convention implementation.

中国代表团参加缔约方大会第一次会议
The Chinese delegation attends COP1

中国代表团参加缔约方大会第二次会议
The Chinese delegation attends COP2

中国代表团参加缔约方大会第三次会议
The Chinese delegation attends COP3

中国代表团参加缔约方大会第四次会议
The Chinese delegation attends COP4

《国家实施计划》编制领导小组第一次会议
The first meeting of the NIP Development leading group

《国家实施计划》编制项目启动会
Inception workshop on NIP development

国家履约工作协调组协调员会议
NCG meeting

《国家实施计划》编制过程中多次召开利益相关方咨询沟通会
The stakeholder consultation and communication meetings during the development of NIP

《国家实施计划》启动会
NIP Launching Conference

履约进展

《国家实施计划》

在国际社会帮助下，环保总局组织相关部门、行业协会、大专院校、科研院所及国际专家开展了《国家实施计划》编制工作。其间分别召开了多次领导小组协调员会议和联络员会议，5 次技术协调国际研讨会、3 次地方相关部门和企业参加的分区域研讨会、12 次行业交流讨论会，以及数十次清单调查培训会和专题战略研讨会；书面征求了领导小组成员单位和相关行业协会的意见。广泛听取了来自国内有关部门、地方政府、相关行业、企业、非政府组织、公众，联合国工业发展组织（UNIDO）、开发计划署（UNDP）、环境规划署（UNEP）、粮农组织（FAO）、全球环境基金（GEF）、世界银行（WB）及意大利、加拿大、美国、日本、德国和挪威等国家有关专家的意见，并反复讨论和不断修改。2007 年 1 月 24 日，国家履约工作协调组第一次会议审议并一致通过了《国家实施计划》；4 月 14 日，国务院批准《国家实施计划》；4 月 18 日，《国家实施计划》报送到缔约方大会；7 月 3 日，《国家实施计划》启动会召开，履约工作全面展开。

基础调查评估

◆初步调查了：

※ 杀虫剂类 POPs 和多氯联苯的生产、流通、使用和进出口的情况
※ 二恶英 POPs 的排放清单与重点行业的情况
※ 杀虫剂类 POPs 和多氯联苯的库存、废弃和污染场地的情况

◆全面评估了中国 POPs 相关管理政策、法规和机构能力
◆初步评估了 POPs 削减、替代、处理处置和控制技术

上述基础调查评估的成果，为《国家实施计划》的编制提供了重要的数据和信息支持。

Progress in Convention Implementation

National Implementation Plan

The State Environmental Protection Administration, together with related departments, trade associations, academies, research institutes as well as international experts carried out the NIP development. To widely consult with different stakeholders, many rounds of coordination meetings were held, including five international technical coordination meetings, three regional workshops attended by relevant local departments and enterprises, twelve sector communication meetings, inventory investigation trainings and thematic strategies symposia. Opinions were extensively collected from experts of domestic agencies, local governments, related sectors, enterprises, non-governmental organizations, the public, UNIDO, UNDP, UNEP, FAO, GEF, WB, as well as from countries including Italy, Canada, the United States, Japan, Germany and Norway. Revisions were made after each round of discussions. On January 24, 2007, the first NCG meeting reviewed and unanimously adopted the NIP; on April 14, the State Council approved the NIP; on April 18, the NIP was submitted to the Conference of the Parties; on July 3, the NIP Launching Conference was held, which signals the all around implementation of the Convention in China.

Basic Investigation & Assessment

▲ Preliminary inventory investigation was carried out on:

- ◎ Production, circulation, use and import and export of POPs pesticides and PCBs
- ◎ Releases of Dioxin in key sectors
- ◎ Obsolete stockpiles, waste and contaminated sites

▲ Comprehensive evaluation and gap analysis of POPs related laws, regulations and standards have been completed.

▲ Primary assessments are made on the availability of technologies for POPs reduction, alternatives, control, treatment and disposal.

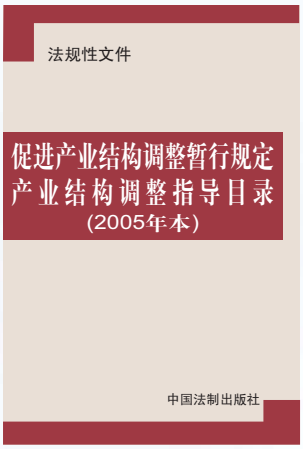
The above achievements provide important data and information for the development of NIP.

政策法规改进

自 2001 年 5 月 23 日签署公约以来，中国已陆续对部分 POPs 相关的政策、法规和标准进行了修订。

产业政策

2005 年 11 月 5 日，经国务院批准，发展改革委发布了《产业结构调整目录》（2005 年本），其中多处考虑了淘汰、削减和控制 POPs 的要求。



第一类：鼓励类

- ▲高效、低毒、安全新品种农药及中间体开发生产
- ▲氯化法钛白粉生产
- ▲无元素氯（ECF）和全无氯（TCF）化学纸浆漂白工艺开发及应用
- ▲医疗废物处置中心建设
- ▲危险废弃物处理中心建设
- ▲削减和控制二恶英排放的技术开发与应用
- ▲持久性有机污染物类产品的替代品开发与应用
- ▲废弃持久性有机污染物类产品处置技术开发与应用

第二类：限制类

- ▲以滴滴涕为原料的生产三氯杀螨醇项目
- ▲以六氯苯为原料的生产五氯酚钠项目
- ▲180平方米以下烧结机项目
- ▲再生有色金属生产中采用直接燃煤的反射炉项目

Improvement on Policies and Regulations

Since the signing of the Convention on May 23, 2001, China has formulated or revised part of the policies, regulations and standards for controlling and eliminating POPs.

Industrial Policies

On November 5, 2005, the National Development and Reform Commission issued Guiding Catalogue of Industrial Structure Regulation" (2005 edition), which takes into account the needs of eliminating, reducing and controlling POPs for the implementation of the Convention.

Category I: Encouragement

◇ Development and production of new varieties of high-efficient, low-toxic and safe pesticides and intermediates
◇ Production of chlorinated titanium dioxide
◇ Development and application of ECF and TCF chemical pulp bleaching technologies
◇ Construction of medical waste treatment center
◇ Construction of hazardous waste treatment center
◇ Development and application of technologies to reduce and control dioxin release
◇ Development and application of POPs alternatives
◇ Development and application of POPs containing waste disposal technologies

Category II: Restriction

◇ Projects of dicofol production with DDT as raw materials
◇ Projects of sodium pentachlorophenate production with hexachlorobenzene as raw materials
◇ Sintering machine projects of less than 180 square meters
◇ Reverberatory furnace projects which burn coal directly while producing secondary non-ferrous metal

第三类：淘汰类

杀虫剂类：

▲氯丹（农药）

▲七氯（农药）

▲滴滴涕（根据国家履行国际公约总体计划要求进行淘汰）

▲六氯苯（根据国家履行国际公约总体计划要求进行淘汰）

▲灭蚁灵（根据国家履行国际公约总体计划要求进行淘汰）

▲含滴滴涕的油漆生产工艺（根据国家履行国际公约总体计划要求进行淘汰）

▲采用滴滴涕为原料非封闭生产三氯杀螨醇工艺（根据国家履行国际公约总体计划要求进行淘汰）

PCBs类：

▲多氯联苯（农药）

二恶英类：

▲土法炼油

▲石墨阳极隔膜法烧碱

▲土法炼焦（含改良焦炉）

▲炭化室高度小于4.3米焦炉（3.2米及以上捣固焦炉除外）（2007年，西部地区2009年）

▲土烧结矿

▲热烧结矿

▲30平方米以下烧结机（2005年）

▲炉床面积1.5平方米及以下密闭鼓风炉炼铜工艺及设备

▲炉床面积1.5～10平方米密闭鼓风炉炼铜工艺及设备（2006年）

▲10平方米及以上密闭鼓风炉炼铜工艺及设备（2007）

▲电炉、反射炉炼铜工艺及设备（2006）

▲采用烧结锅、烧结盘、简易高炉等落后方式炼铅工艺及设备

▲利用坩埚炉熔炼再生铝合金、再生铅的工艺（2005年）

▲水泥土（蛋）窑、普通立窑

▲石灰土立窑

▲1.7万吨/年以下的化学制浆生产线

▲3.4万吨/年以下的草浆生产装置（2007年）

Category III: Elimination

POPs pesticides

◇ Chlordane (pesticide)
◇ Heptachlor (pesticide)
◇ DDT (to be eliminated according to the NIP)
◇ Hexachlorobenzene (to be eliminated according to the NIP)
◇ Mirex (to be eliminated according to the NIP)
◇ Production technologies of DDT based paint (to be eliminated according to the NIP)
◇ Non-closed production technologies of dicofol with DDT as raw materials (to be eliminated according to the NIP)

PCBs

◇ PCBs (pesticide)

Dioxin

◇ Oil refining in indigenous ways
◇ Caustic soda production by means of graphite anode diaphragm
◇ Coking in indigenous ways (including improved coke ovens)
◇ Coke ovens with coking chambers lower than 4.3 meters (excluding stamp-charging coke ovens 3.2 meters high or higher) (2007, 2009 for Western China)
◇ Soil sinter
◇ Hot sinter
◇ Sintering machines less than 30 square meters (2005)
◇ Technologies and equipment of copper smelting with sealed blast furnaces whose hearth areas are 1.5 square meters or smaller
◇ Technologies and equipment of copper smelting with sealed blast furnaces whose hearth areas are 1.5~10 square meters (2006)
◇ Technologies and equipment of copper smelting with sealed blast furnaces whose hearth areas are 10 square meters or larger (2007)
◇ Technologies and equipment of copper smelting with electric furnaces and reverberatory furnaces (2006)
◇ Technologies and equipment of lead smelting in backward ways by using sintering pots, sintering pans, simple blast furnaces, etc.
◇ Technologies of melting secondary aluminum alloy and lead with crucible furnaces (2005)
◇ Cement-soil (egg-shaped) kilns, ordinary shaft kilns
◇ Lime shaft kilns
◇ Chemical pulping production lines with annual capacity less than 17,000 tons
◇ Production apparatus of straw pulp with annual capacity lower than 34,000 tons (2007)

国家标准

1. 已有四项国家污染控制标准中规定二恶英的排放限值：

◆《危险废物焚烧污染控制标准》（GB18484—2001）

◆《生活垃圾焚烧污染控制标准》（GB18485—2001）

◆《水泥工业大气污染物排放标准》（GB4915—2004）

◆《城镇污水处理厂污染物排放标准》（GB18918—2002）

2. 已有五项国家质量标准中规定 POPs 限值：

◆《地表水环境质量标准》（GB3838—2002）规定了作为集中式生活饮用地表水水源地滴滴涕、六氯苯、多氯联苯的限值

◆《海洋沉积物质量》（GB18668—2002）规定了滴滴涕、多氯联苯的限值

◆《渔业水质标准》（GB3097—1997）、《土壤环境质量标准》（GB15618—1995）、《海水水质标准》（GB3097—1997）中规定了滴滴涕的限值

3. 已有两项国家标准规定食品和饮用水中 POPs 的含量限值：

◆《食品中污染物限量》(GB2762—2005) 规定了粮食、蔬菜、肉和蛋等食品中滴滴涕、艾氏剂、狄氏剂和七氯的残留限量，此外，还规定了海产品、虫、虾以及藻类食品中的多氯联苯的含量限值

◆新修订的《生活饮用水卫生标准》（GB5749—2006）中新增七氯、六氯苯两种 POPs 指标，加上旧标准已经列入的滴滴涕，共有 3 种 POPs 在新标准中榜上有名。

4. 已有四项环境介质中二恶英检测方法国家标准：

◆《水质 二恶英类的测定 同位素稀释高分辨气相色谱－高分辨质谱法》（HJ 77.1—2008）

◆《环境空气和废气 二恶英类的测定 同位素稀释高分辨气相色谱－高分辨质谱法》（HJ 77.2—2008）

◆《固体废物 二恶英类的测定 同位素稀释高分辨气相色谱－高分辨质谱法》（HJ 77.3—2008）

◆《土壤和沉积物 二恶英类的测定 同位素稀释高分辨气相色谱－高分辨质谱法》（HJ 77.4—2008）

National Standards

1.The release limits of dioxin were considered in four national standards:

◇ Pollution Control Standard for Hazardous Wastes Incineration (GB18484-2001)
◇ Standard for Pollution Control on Municipal Solid Waste Incineration (GB18485-2001)
◇ Emission Standard of Air Pollutants for Cement Industry (GB4915-2004)
◇ Standards of Pollutants for Municipal Wastewater Treatment Plant (GB18918-2002)

2.The limits of POPs were referred in five national quality standards:

◇ The Standard on Surface Water Environmental Quality (GB3838-2002) has regulated limits of DDT, hexachlorobenzene and PCBs on centralized drinking surface water sources
◇ The National Standard on Marine Sediment Quality (GB18668-2002) has regulated limits on DDT and PCBs
◇ The Standard on Fishery Water Quality (GB 11607-89), the Standard on Soil Environmental Quality (GB 15618-1995) and the Standard on Seawater Quality (GB 3097-1997) have regulated restrictions on DDT

3.The limits of POPs contained in foods and drinking water have been regulated in the following two national standards :

◇ The Maximum Levels of Contaminants in Foods (GB2762-2005) has regulated standards on DDT, aldrin, dieldrin and heptachlor residues in foods such as grains, vegetables, meat and eggs and so on. Besides, it has also regulated limits of PCBs contained in sea foods, insects, shrimps and alga foods
◇ In the Sanitary Standard for Drinking Water (GB5749-2006) which is newly revised, heptachlor and hexachlorobenzene are added in addition to DDT.

4.The detection and analysis methods of dioxin for four environmental media were referred in four national standards:

◇ Water quality - PCDD/Fs Measurement Isotope Dilution/ HR Gas Chromatography - HR Mass Spectrometry Method (HJ77.1-2008).
◇ Air and Exhaust Air - PCDD/Fs Measurement Isotope Dilution / HR Gas Chromatography - HR Mass Spectrometry Method (HJ77.2-2008).
◇ Solid Waste - PCDD/Fs Measurement Isotope Dilution / HR Gas Chromatography - HR Mass Spectrometry Method (HJ77.3-2008).
◇ Soil and Sediment - PCDD/Fs Measurement Isotope Dilution / HR Gas Chromatography - HR Mass Spectrometry Method. (HJ77.4-2008)

规范导则

1. 下列废物焚烧相关技术规范，均提出了二恶英防治的要求

《医疗废物集中焚烧处置工程技术规范》（HJ/T177—2005）
《危险废物集中焚烧处置工程建设技术规范》（HJ/T176—2005）
《废弃机电产品集中拆解利用处置区环境保护技术规范》（试行，HJ/T181—2005）

2.《白蚁防治综合虫害防治（IPM）技术规范》已编制完毕。

地方规章

我国首例针对多氯联苯污染防治的专项省级管理规定《浙江省多氯联苯污染环境防治与控制规定》出台，对多氯联苯全过程管理与处理处置做出了全面规定。

Guidance and Guidelines

1.The following technical guidelines related to waste incineration have put forward some basic requirements for dioxin pollution prevention and control:

◇ Technical Specifications for Centralized Incineration of Medical Wastes (HJ/T177-2005)
◇ Technical Specifications for Centralized Incineration of Hazardous Wastes (HJ/T176-2005)
◇ Technical Specifications for Environmental Protection of Centralized District of Disassembly Utilization and Disposition of Waste Mechanical and Electronic Equipment (Trial Version, HJ/T181-2005)

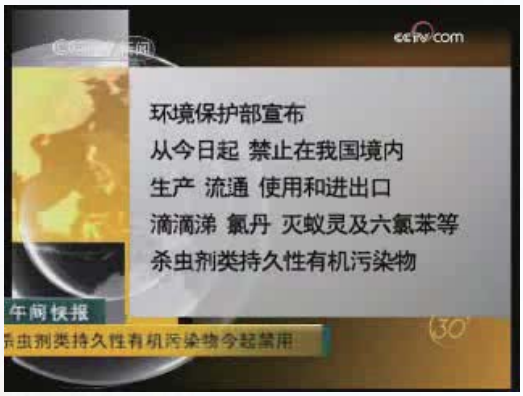
2.The formulation of Technical Specifications of Integrated Pest Management(IPM) for Termite Prevention and Control has been completed.

Local Regulation

The first specific provincial regulation PCB Pollution Prevention and Control in Zhejiang Province was issued, which defines a full-scale regulation on PCB life-cycle management and disposal.

宣传教育培训

1. 在电视台和报纸开设专题节目／专栏发布普及 POPs 知识，及《国家实施计划》相关战略和行动等内容。



2009 年 5 月 17 日中央电视台一套《新闻 30 分》栏目播放杀虫剂 POPs 专题活动
On May 17, 2009, "News in 30 mins" on CCTV–1 broadcasted thematic activities on pesticide POPs

2. 定期更新 POPs 履约外网、《POPs 履约工作通讯》和海报。

"中国 POPs 履约行动"网站提供及时的履约资讯
The website of POPs Implementation Action in China provides timely news

POPs 履约工作通讯
POPs Action in China

Publicity Enhancement and Awareness Raising

1.Thematic Programs are reported on TV and newspapers to disseminate POPs knowledge, and the strategies and actions of China's NIP.

人民日报和中国环境报的专题报道
Feature Report of People's Daily and China Environment News

2.The website, newsletters and posters are updated regularly

POPs 知识系列海报
Serial posters of POPs knowledge

3. 针对政府管理部门、科研院所、行业部门和新闻媒体召开主题各异的宣传培训活动。

环境保护部副部长张力军出席 2009 年 5 月 17 日举办的
“落实政府公告，践行绿色承诺，共建和谐家园”的宣传活动并致辞
Vice Minister of MEP, Mr. Zhang Lijun attended and addressed publicity activities on fulfilling government announcement, practicing green commitment, building harmonious homeland on the May 17, 2009

国家履约工作协调组联络员会议
NCG meeting for liaison members

3. Thematic training programs and workshops targeting at administrative offices, researchers, industrial managers and news reporters were organized.

技术专家研讨会
Special technical experts workshops

2006 年举行的《国家实施计划》系列区域座谈会
Three regional workshops on NIP held in 2006

4. 积极参与区域和国际交流活动

环境保护部副部长李干杰出席 2008 年 12 月 10 日在北京召开的二恶英减排 BAT/BEP 东南亚论坛并致辞
Vice-minister of MEP, Mr. Li Ganjie attended and addressed the 2008 Annual Meeting of Regional BAT/BEP Forum for ESEA held in Beijing on Dec. 10, 2008

六次国际技术协调会
Six International TCG Workshops on POPs

4. Actively participate in regional and international exchange activities

参加 2007 年 12 月 1 日在维也纳召开的 UNIDO 第十二次大会并举办专题展览
Participated in the 12th UNIDO General Conference convened in Vienna on Dec. 1, 2007 and held thematic poster exhibitions

2008 年 11 月 24–25 日在上海召开德朝合作项目朝鲜民主主义人民共和国履约信息沟通会
Participated in Consultation on Issues Related to the Stockholm Convention on POPs in DPRK held in Shanghai on Nov. 24–25, 2008

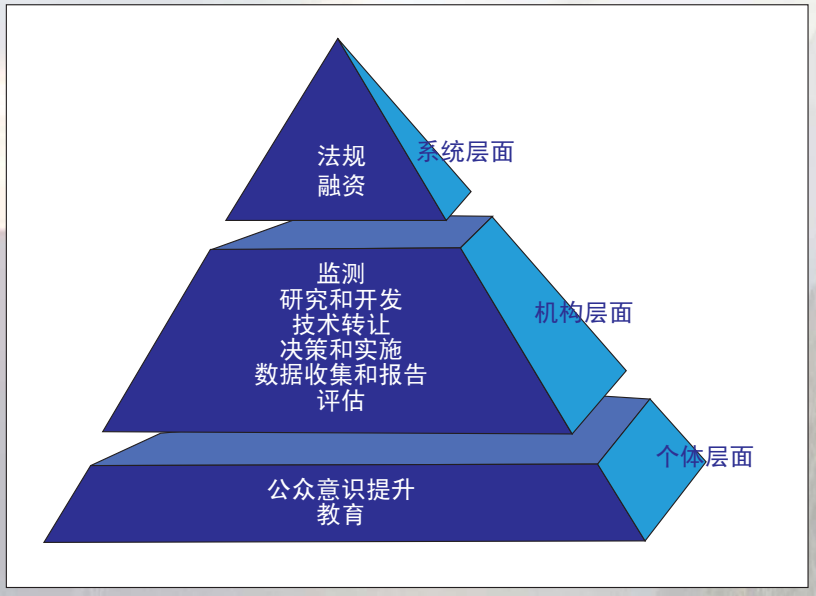
履约能力建设和示范

在公约资金机制——全球环境基金（GEF）、双边和国际机构的支持和帮助下，中国启动了履约长期能力建设工作；围绕 POPs 削减、淘汰、处理处置和控制开展了一系列的履约示范活动：多氯联苯废物管理与处置、白蚁防治领域的氯丹灭蚁灵替代、船舶防污领域的含滴滴涕防污漆替代、含滴滴涕三氯杀螨醇生产控制和综合虫害管理技术示范、医疗废物可持续管理、中国废弃杀虫剂类POPs和其他POPs废物环境无害化管理和处置等。

中国履行斯德哥尔摩公约长期能力建设

尽管中国的《国家实施计划》制定了具体的履约战略和行动方案，但要顺利实施《国家实施计划》，仍需要开展相当多的能力建设活动。

“中国履行斯德哥尔摩公约长期能力建设项目”将通过建立或修改法律、法规及标准，加强机构监测、研发、技术转移、信息交流，强化监督、执行及评估能力等，推动建立有效的履约基础，为中国顺利实施《国家实施计划》提供有效支持。



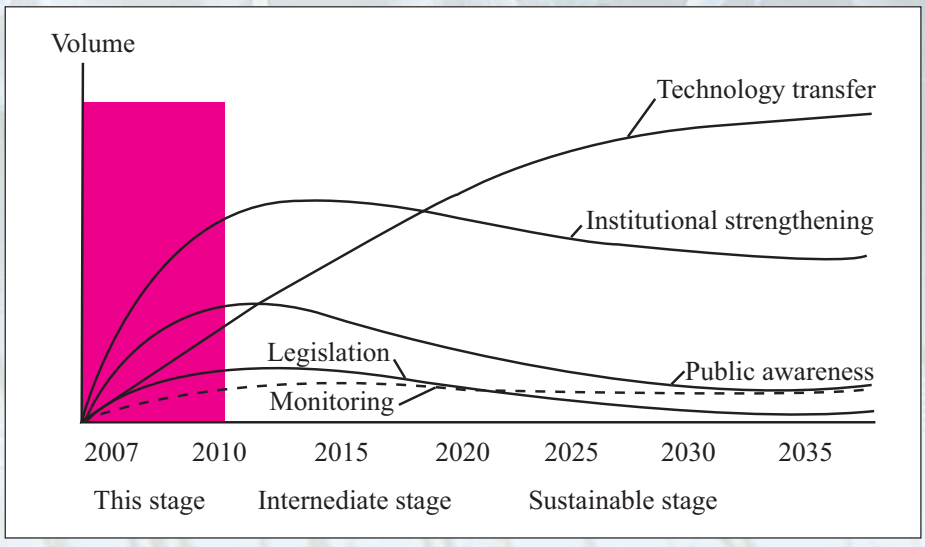
Capacity Building and Demonstration Activities

A series of implementation activities focusing on reduction, phasing out, treatment and disposal and control on POPs have been carried out throughout China with the support of the Convention financial mechanism-Global Environment Facilities (GEF), bilateral governments and international agencies.

Capacity Building for Efficient Implementation of the NIP

Although NIP identifies concrete strategies and actions for Convention implementation, there are still gaps of capacity that need to be filled in order to ensure the smooth implementation of the NIP.

The project of Strengthening Institutions, Regulations and Enforcement Capacities for Efficient Implementation of the NIP in China aims at effectively and efficiently assisting China in implementing the Stockholm Convention by establishing/amending laws, regulations and standards, strengthening institutions for monitoring, R&D, promotion of technology development and transfer, facilitating data and information collection, and enhancing capabilities for supervision, enforcement, and evaluation, so as to create an enabling environment in China for Convention implementation.



多氯联苯管理与处置

20 世纪 60 年代至 80 年代初，中国曾生产过约 7000 ～ 10000 吨多氯联苯油，其中约 6000 吨作为电力电容器的浸渍剂，用于约 50 万台电力电容器的生产。自 20 世纪 80 年代开始，中国陆续对下线的含 PCBs 电力装置及其废物进行集中封存或暂存，集中封存方式主要包括山洞和地下封存两种方式，暂存主要存放在库房或厂区空地。目前，大部分封存点均已超过规定设计年限，部分封存点出现渗水、泄漏现象，对周围环境及人群造成较大隐患。此外，部分含 PCB 电力装置还在使用。

2006 年启动的 GEF "中国多氯联苯管理与处置示范项目" 旨在、对封存的废弃多氯联苯电力装置及其废物进行无害化处置，示范在线多氯联苯电力装置的管理，并在此基础上制定我国多氯联苯管理与处置的全国推广规划。

典型的含多氯联苯电力装置暂存点
Typical temporary storage location of PCBs–containing electric equipment

典型的含多氯联苯电力装置封存点（石棺封存）
Typical sealing location (sealed in kistvaens) of PCBs–containing electric equipment

典型的含多氯联苯电力装置封存点（山洞封存）
Typical sealing location (sealed in caves) of PCBs–containing electric equipment

Management and Disposal of PCBs

From the 1960s to the early 1980s, China produced about 7,000~10,000 tons of PCBs oil, 6,000 tons of which were used as the impregnant for the production of about 500,000 electrical capacitors. From the beginning of 1980s, China began to seal or store worn-out PCBs-containing electric equipments and wastes at concentration spots, and the former were mainly sealed in caves and underground, the latter temporarily stored in warehouses or on vacant factory grounds. At present, most of the concentrated sealing locations have overrun the prescribed 20-year deadline, and part of the temporary storage locations have overrun its 3-year useful life, and water seepage and leakage occurred frequently, which posed a potential threat to the surrounding environment and people.

Sponsered by GEF, the Demonstration Project on Management and Disposal of PCBs in China was initiated in 2006, aiming to demonstrate the dechlorination technology applied to on-line PCBs electric equipment and carry out environmentally sound disposal of obsolete PCBs electric sealing locations and their wastes, and to develop our country's national promotion plan of PCBs management and disposal.

消除电力装置中的多氯联苯
Eliminate PCBs contained in the electric equipment

现有的多氯联苯废物高温焚烧处置设施将在项目中得到进一步改进
Further improvement will be made to the existing high–temperature incineration disposal facilities during the project

白蚁防治领域氯丹灭蚁灵替代

中国有 28 个省、市、自治区存在白蚁危害，每年所造成的损失达 20~25 亿人民币。氯丹和灭蚁灵防治由于技术简便、效果明显、成本低廉，一度是我国房屋建筑白蚁防治的重要技术手段。但同时也对周边环境和居民健康构成潜在风险。

2006 年启动实施的 GEF“中国白蚁防治氯丹灭蚁灵替代示范项目”旨在通过在三个示范省（江苏、湖南、安徽）引入综合虫害管理（IPM）进行白蚁防治，淘汰当地氯丹和灭蚁灵的使用，促进白蚁防治行业整体技术和管理水平的提高；同时示范氯丹和灭蚁灵生产线关闭并清理污染场地，从根本上消除对氯丹和灭蚁灵对环境和人类健康的威胁。，在此基础上积累经验，设计出经济合理的全国推广计划，以推动在全国范围内淘汰氯丹和灭蚁灵。通过执行该项目，可永久性淘汰每年 150 吨的氯丹和灭蚁灵的生产和使用。；

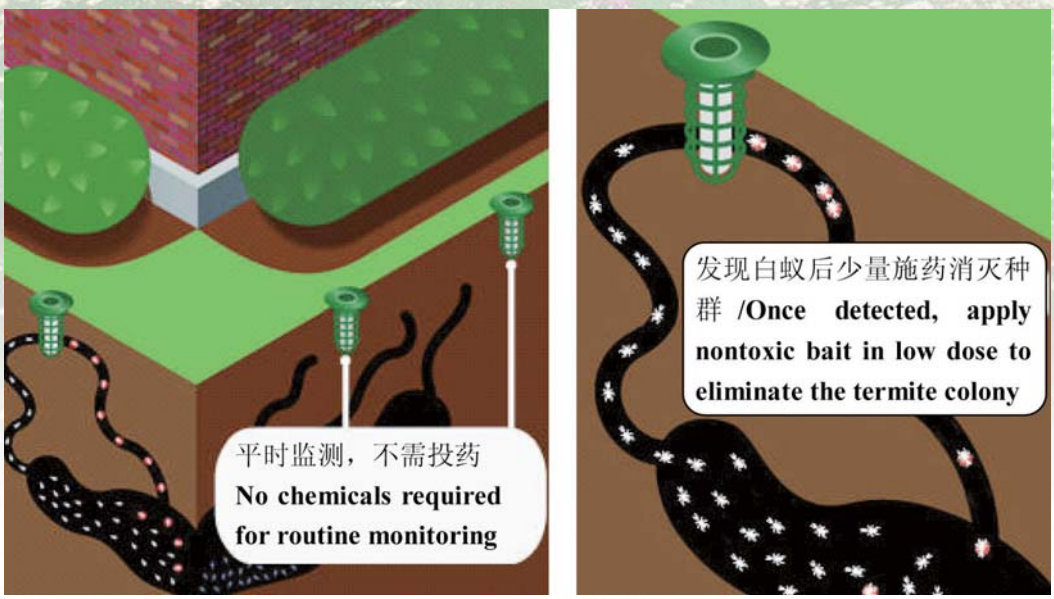
小小白蚁危害巨大
Little termites cause tremendous harms

示范项目中颁发的 IPM 培训师合格证书
IPM Trainer Certificate issued in the demonstration project

Alternatives to Chlordane and Mirex in Termite Control

There are 28 termite-affected provinces, municipalities, and autonomous regions in China, causing an annual loss up to 2-2.5 billion yuan (RMB). The application of chlordane and mirex was the predominant technical instrument in termite control field due to easy handing, high efficency and cost-effectiveness. However, their wide application posed potential threat to human health and the surrounding environment.

The Demonstration Project on Alternative of Chlordane and Mirex in Termite Control in China, sponsored by GEF, was initiated in 2006, aiming to phase out chlordane and mirex by introducing Integrated Pest Management (IPM) for termite prevention and control to three demonstration provinces (Jiangsu, Hunan and Anhui). It includes the following activities: demonstrating the closedown of chlordane and mirex production lines and clean contaminated sites, and accumulating experience in designing economical and rational national replication program to eliminate chlordane and mirex throughout China. By executing such a project, the production and application of chlordane and mirex can be stopped permanently, equaling to 150 tons every year.

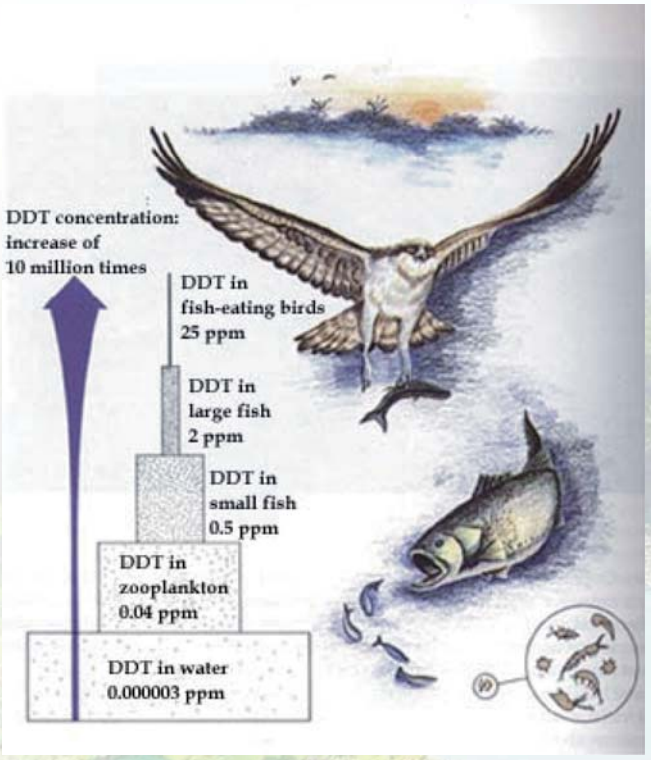


饵剂监测 – 控制系统是符合 IPM 理念的氯丹灭蚁灵替代技术
Bait supervision and control system is a chlordane and mirex alternative technology in compliance with IPM concept.

船舶防污领域的含滴滴涕防污漆替代

中国是世界上唯一仍将滴滴涕用于船舶防污领域的国家，目前全国有十几家含滴滴涕防污漆生产企业，每年消耗滴滴涕约 250 吨用于生产防污漆（5,000 吨左右）。含滴滴涕防污漆主要用于我国沿海中小型渔船的船底防污。大量涂有含滴滴涕防污漆的渔船在海上进行捕渔作业时，会对海水水质、海洋生物造成直接影响，并可能在海产品中蓄积而通过食物链最终危害人类。

2007 年启动实施的 GEF“中国用于防污漆生产的滴滴涕替代项目”旨在全面淘汰中国含滴滴涕防污漆的生产和使用，并从淘汰过程中获取技术、经验和手段，促进建立保护海洋环境和人类健康免受有毒防污漆危害的长效机制。



滴滴涕具有惊人的生物累积和沿食物链的生物放大效应
DDT has astonishing effects of bioaccumulation and bio–magnification along the food chain

涂有含滴滴涕防污漆的中小型渔船在作业过程中会向水体释放出滴滴涕
Medium and small–sized fishing vessels with DDT–containing antifouling paint release DDT into the water during fishing operation

Alternatives of DDT-containing Antifouling Paint in Ship Antifouling Field

As the only nation still applying DDT in ship antifouling filed, China has more than ten DDT-containing antifouling paint manufacturers. 250 tons of DDT are used each year to produce 5,000 tons of antifouling paints. The DDT-containing antifouling paints were mainly used for ship antifouling of medium- and small- fishing vessels in coastal areas. When a great number of fishing vessels with DDT-containing antifouling paint carry out fishing operation in the sea, they will cause direct harmful effets on the water-quality of the sea and the halobios, and furthermore, DDT will probably accumulate in sea food and eventually endanger human being via food chain.

The Alternatives to DDT Usage for the Production of Anti-fouling Paint program in China, sponsored by GEF, was initiated in 2007 to thoroughly eliminate the production and application of DDT-containing antifouling paints in China, to acquire technology, experience and measures in the elimination process, and to promote the establishment of a long-effect mechanism that protects the marine environment and human health from toxic antifouling paint harms.

滴滴涕、有机锡等防污漆杀生剂可能造成海洋生物的生殖和发育异常
Antifouling paint biocides like DDT, organic–tin, and etc. may cause abnormal reproduction and growth to halobios.

含滴滴涕三氯杀螨醇生产控制和综合虫害管理技术示范

在中国，73% 的滴滴涕曾用于三氯杀螨醇的生产，全国三氯杀螨醇年产量（2009 年前）约 3,000 ～ 4,000 吨。三氯杀螨醇作为杀螨剂主要用在柑橘、苹果和棉花的螨害控制，涉及全国 23 个省市。滴滴涕可随着三氯杀螨醇的生产和使用过程释放到环境中，随着食物链逐级富集最终危害人类健康。沉积到土壤中的三氯杀螨醇及滴滴涕可随着水气循环向更广泛的范围释放或迁移。

2009 年启动实施的 GEF“中国含滴滴涕三氯杀螨醇生产控制和 IPM 技术全额示范项目”将永久性淘汰 3000 多吨滴滴涕生产和近千吨滴滴涕排放。通过开展管理能力建设、政策标准完善、综合虫害管理（IPM）技术示范、宣传教育、废物处置和场地评估、封闭生产管理和监控等活动，帮助农民认识和适应新的螨害控制技术、指导非封闭生产企业科学管理和控制废弃生产场地潜在环境风险、督促封闭三氯杀螨醇生产企业按公约和国家相关政策及标准要求开展生产，以最大限度减少禁用对农业生产、对农民和对相关生产企业的影响，控制废弃生产场地的潜在环境和健康风险问题，最终将改善当地和全球环境的可持续性。

杀虫灯
Light luring

捕食螨
Predatory mites

黄板色诱法
Yellow board

性诱剂
Hormonal luring

Improvement of DDT-based Production of Dicofol and Introduction of Alternative Technologies Including IPM for Leaf Mites Control in China

In China, about 73% of DDT was used as intermediate for the production of dicofol. The annual output of dicofol has been maintained at the level of 3,000 ~ 4,000 tons before 2009. As a miticide, dicofol is widely used in mites control in cotton, citrus and apple plantation, which is widely distributed in 23 provinces of China. DDT can be released to the environment during production and consumption process and bioaccumulate in food chains, and finally threat human health. The dicofol and DDT deposited in the soil could be released and transported to the farther extended area with air and water circulation.

The GEF project, Improvement of DDT-based Production of Dicofol and Introduction of Alternative Technologies Including IPM for Leaf Mites Control in China, initiated in 2009, will phase out the production of about 3,000 tons of DDT and the release of nearly one thousand tons of DDT permanently. Through the institutional capacity building, policy and legislation strengthening, the IPM technology demonstration, communication and education, waste disposal, contaminated sites assessment, the close system production management and supervision, the project will increase the awareness and facilitate the adoption of IPM technology among farmers, provide the guidance for the non-closed dicofol production companies to manage and control the potential risks of the obsolete production sites, supervise the closed-system dicofol manufacturers to follow the convention requirements and related national policies in order to minimize its impact on the agriculture, farmers and manufacturers. and control the potential risks of environment and health from the obsolete production sites and improve the sustainability of the local and global environment.

非封闭系统三氯杀螨醇生产设备
Non–closed facility for dicofol production

废弃的非封闭系统氯杀螨醇生产车间
Obsolete non–closed system dicofol production workshop

医疗废物可持续环境管理

2006 年，中国的医疗废物产生量高达 570,000 吨，焚烧是目前最为普遍的处置方法，但焚烧过程极易产生二恶英类 POPs，据估算中国每年由此所排放的二恶英高达 1176.3 gTEQ，占所有源总排放量的 11%。

2008 年启动的“中国医疗废物可持续环境管理示范项目”旨在按照公约要求，借鉴国内外先进的管理经验和处置技术（尤其是高温蒸汽技术、微波处理技术和化学处理技术等医疗废物非焚烧处置技术），加强医疗废物的全生命周期管理，在医疗废物管理与处置行业中广泛推行最佳可行技术／最佳环境实践，实现医疗废物减量化和无害化，进而持续地减少或消除二恶英类 POPs 和其他有害污染物的排放，以保护生态环境和人类健康。

医疗废物高温高压灭菌锅
High temperature and high-pressure medical wastes sterilizers

Environmentally Sustainable Management of Medical Wastes

In 2006, China produced up to 570,000 tons of medical wastes with incineration as the most popular disposal method. Unintentional POPs of Dioxin can be produced easily during the disposal of medical wastes, and it is estimated that China releases annually up to 1176.3g TEQs of Dioxin, accounting for 11% of the total release.

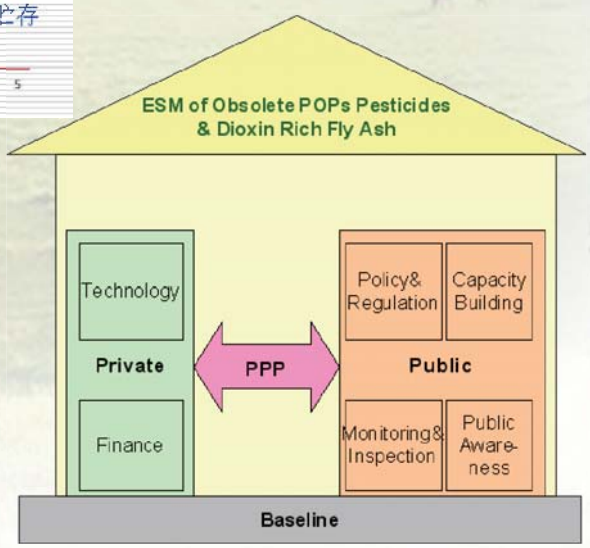
The Demonstration Project on Environmentally Sustainable Management of Medical Wastes, aims to use advanced foreign management experience and disposal technology (especially non-incineration technology such as autoclaving technology, micro-wave treatment technology and chemical treatment technology) in accordance with the requirements of the Convention, to strengthen life cycle management of medical wastes; by widely adopting BAT/BEP in medical wastes management and disposal sector, to realize medical wastes reduction and environmental soundness, thus to continuously reduce and eliminate the release of Dioxin POPs and other global harmful pollutants to protect the ecological environment and human health.

医疗废物微波消毒处理系统
Medical wastes microwave sterilization and disposal system

中国废弃杀虫剂类 POPs 和其他 POPs 废物环境无害化管理和处置等置

中国从上世界 50 年代开始生产和使用 POPs 杀虫剂，用于农业生产、白蚁防治、病媒控制和农药及化工生产中间体。由于长期的生产和使用历史，以及粗放式的生产和管理方式，在生产、流通和使用流域遗留的大量的废弃 POPs 杀虫剂和相关废物。这些 POPs 废物基本采取露天堆放和简易圈围的存放方式，对环境和人体健康造成潜在危险。此外，废物的焚烧、金属冶炼等过程产生了大量含二恶英的飞灰，成为二次生产的 POPs 废物。

“中国废弃杀虫剂类 POPs 和其它 POPs 废物环境无害化管理和处置全额项目”＜将采用公约建议的环境无害化技术，收集和处理我国废弃杀虫剂 POPs，探索技术经济可行的二　英飞灰管理和处置技术，同时支持开展危险废物相关管理政策、技术标准、导则的评估和制修订、POPs 废物管理和处置能力建设等活动，以期促进我国 POPs 废物环境无害化管理与处置的整体能力和水平的提高，履行公约规定的相关义务。

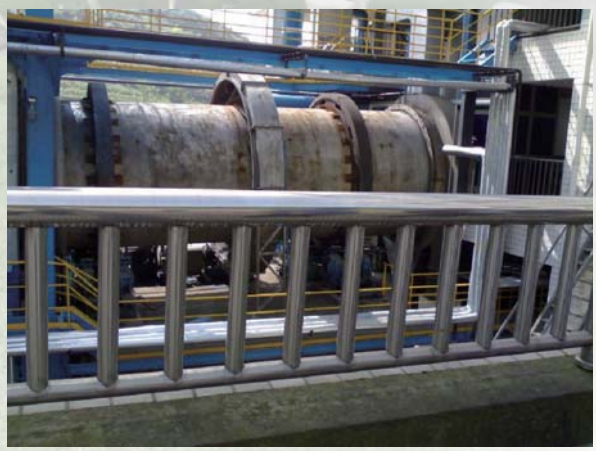


Environmentally Sound Management and Disposal of Obsolete POPs Pesticides and Other POPs Wastes in China

China started to produce POPs pesticides in the 1950's, which were widely used in agriculture production, termite prevention and control, disease vector control and intermediate for pesticides and chemicals production. Because of the long history of production and use, and simple production and management methods, there existed large amount of obsolete POPs pesticides and relevant wastes from production, distribution and use sectors. These POPs wastes are basically open air stockpiled and with simple enclosure, which pose potential risks for the environment and human health. In addition, a large amount of dioxin containing fly ash from incineration and metallurgical smelting becomes secondary POPs wastes.

The GEF full size project Environmentally Sound Management and Disposal of Obsolete POPs Pesticides and Other POPs Wastes in China will adopt environment sound technologies recommended by the Convention to collect and dispose China's obsolete pesticide POPs, explore technical and economical feasible dioxin fly ash management and disposal technologies, meanwhile provide support to the establishment or revision of relevant policies, technical standards and guidance, and POPs wastes management and disposal capacity building, in order to upgrade the overall capacity and level of environmentally sound management of POPs wastes in China, and to fulfill relevant obligations stipulated in the Convention.

水泥窑共处置技术
Cement kiln co–processing technology



回转窑高温焚烧技术
Rotary kiln high temperature incineration technology
等离子体反应器
Plasma reactor

伙伴关系

中国政府坚持对外开放，把“引进来”和“走出去”结合起来，不断扩大开放领域，优化开放结构，提高开放质量，完善内外联动、互利共赢、安全高效的开放型经济体系，不断增强经济全球化条件下参与国际经济合作尤其是在环境保护对外经济合作的能力和作用。

近年来在 POPs 领域，环境保护部与各双边国家和国际机构精诚合作，建立了针对具体和现实问题、着眼全球和长远利益、多方联合和共同创新的战略伙伴关系，持续推动南北合作、南南合作，促进双边、多边的资金援助和技术援助与转让；同时，不断完善国内政府部门、学术界、产业界之间的沟通、协调与合作，鼓励公众参与。

国际合作

环境保护部代表中国政府与各国际组织和双边机构密切合作，成功启动实施了一系列 POPs 履约项目。通过实施这些项目，引入先进的管理理念和技术，对于推动中国的履约工作起到了非常关键的作用，同时许多项目在技术和管理上具有很强的创新性和开拓意义，不仅对中国同时对广大发展中国家也将发挥很好的示范意义。

Partnership

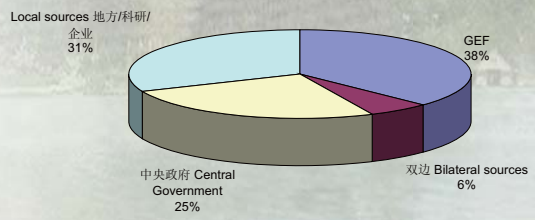
Adhering to the principle of opening up and in line with the strategies of “bringing in” and “going out”, the Chinese government is making efforts to continuously expand opening up fields, optimize the structure to develop a flexible, safe and efficient economic system, so as to achieve the ultimate win-win goals. Capacities are strengthened for active participation, in particular in the field of environment protection.

In terms of POPs, through sincere cooperation with bilateral partners and multilateral institutions, MEP has carried out extensive cooperation in promoting strategic partnership for provision of solutions on concrete and realistic problems and achievement of global and long-term benefits. South-North and South-South cooperation will be pursued for financial and technical support. At the same time the establishment of Public Private Partnerships (PPPs) and facilitation of communications among governmental organizations, academies and industries are encouraged.

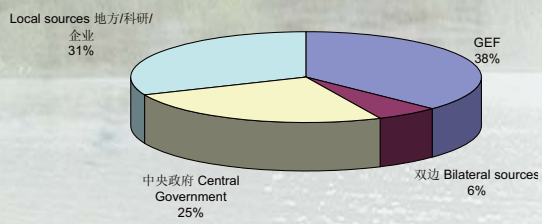
International Cooperation

With the close cooperation with international organizations and bilateral partners, MEP has initiated a series of POPs related projects, which have played key roles in promoting the Convention implementation work in China. The innovative technologies and pioneering experiences that have been gained over these projects will also provide good guidance to other developing countries.

领 域	项 目 名 称	国际出资方	合作机构	进展状况
POPs 综合	四川省汶川特大地震化学品污染风险评估	GEF	WB	已完成
	北朝鲜 POPs 公约履约考察和信息交流技术支持	德国、瑞士	UNITAR	已完成
	中国 POPs 污染场地管理与处置技术评价	德国	GTZ	已完成
	中国编制和执行国家实施计划能力建设	瑞士	UNITAR	已完成
	中国履行《斯德哥尔摩公约》能力建设及国家实施计划编制	GEF	UNIDO	已完成
	持久性有机污染物及其它有毒物质污染管理	美国	USEPA	实施中
	POPs 对妇女儿童毒性暴露影响案例研究	加拿大	WB	已完成
	中国国家实施计划编制前期能力加强	加拿大	WB	已完成
	中国履行斯德哥尔摩公约地方能力建设	挪威	NIVA	实施中
	中国履行斯德哥尔摩公约长期能力建设	GEF	UNIDO	实施中
杀虫剂类 POPs	中国削减和淘汰杀虫剂类 POPs 的战略	意大利	UNDP	已完成
	白蚁防治氯丹灭蚁灵替代药剂案例研究	加拿大	WB	已完成
	中国含滴滴涕三氯杀螨醇生产控制和综合虫害管理技术示范	GEF	UNDP	实施中
	中国用于防污漆生产的滴滴涕替代全额项目	GEF	UNDP	实施中
	中国白蚁防治氯丹 / 灭蚁灵替代示范项目	GEF	WB	实施中
多氯联苯	中国多氯联苯管理能力加强	加拿大	WB	已完成
	中国多氯联苯清单方法学和削减处置初步战略	意大利		已完成
	中国多氯联苯管理与处置示范	GEF	WB	实施中
	中国在线变压器脱氯示范	意大利	WB	实施中
二恶英	中国二恶英监测能力加强示范	日本	NEDO	已完成
	中国二恶英削减战略：BAT/BEP 和增量成本估算	意大利	UNIDO	已完成
	中国医疗废物环境可持续管理	GEF	UNIDO	实施中
	中国非木浆造纸企业最佳可行技术 / 最佳环境实践研究	加拿大		实施中
	中国造纸行业二恶英减排和控制	瑞典	WB	实施中
	中国废弃杀虫剂类 POPs 和其它 POPs 废物环境无害化管理与处置	GEF	UNIDO	实施中



履约国际合作项目的资金来源
Financial Contribution



机构负责执行的赠款情况
Cooperative Partners

Field	Project title	International Investor	Cooperation Institution	Program Progress
Enabling/ cross-cutting	China Rapid Assessment of Chemical Contamination of the Wenchuan Earthquake in Sichuan Province	GEF	WB	Finished
	Assistance for a Study Tour and Awareness Raising Meeting Related to Activities of the Democratic People's Republic of Korea	Germany, Switzerland	UNITAR	Finished
	China POPs Contaminated Site Management & Disposal Technique Evaluation Project	Germany	GTZ	Finished
	Capacity Building Assistance to China for NIP Development and Implementation	Switzerland	UNITAR	Finished
	Building the Capacity of China to implement the Stockholm Convention and develop a National Implementation Plan	GEF	UNIDO	Finished
	POPs and Other Toxic Substance Pollution Management Program	USA	USEPA	On going
	Evaluation of Effects of Exposure to POPs and Enhancement of Capacity to Manage such Pollutants	Canada	WB	Finished
	Training Course for The Preparation of National Implementation Plan in China	Canada	World Bank	Finished
	Demonstration Project on Local Implementation of the Stockholm Convention	Norway	NIVA	On going
	Strengthening Institutions,Regulations and Enforcement Capacities for Effective and Efficient Implementation of the NIP in China	GEF	UNIDO	On going
POPs Pesticides	Strategy on Reduction and Elimination of Pesticide POPs in China	Italy	UNDP	Finished
	Case study on alternative of chlordane and mirex	Canada	WB	Finished
	Improvement of DDT-based Proudction of Dicofol and Introduction of Alternative Techonologies including IPM for Leaf Mites Control in China (PDF-B)	GEF	UNDP	On going
	Alternatives to DDT Usage for the Production of Antifouling Paint	GEF	UNDP	On going
	Demonstration of Alternatives to Chlordane and Mirex in Termite Control	GEF	WB	On going
PCBs	Capacity Buidling of PCBs management	Canada	WB	Finished
	Development of a PCB Inventory Methodology & A Draft Strategy on PCB Reduction and Disposal in China	Italy		Finished
	Demonstration of PCB Management and Disposal	GEF	WB	On going
	China On-line Transformer Dechlorination Demonstration Project	Italy	WB	On going
Dioxin	China Dioxin Monitoring Capacity Improvement Demonstration Project	Japan	NEDO	Finished
	Strategy to Reduce UP-POPs in China: BAT/BEP and Incremental Cost	Italy	UNIDO	Finished
	Environmentally Sustainable Management of Medical Wastes in China	GEF	UNIDO	On going
	Study on BAT/BEP for Non-Wood Fiber Mills	Canada	WB	On going
	Reduction and Control of Dioxin in Paper Industry of China	Sweden		On going
	Environmentally sound management and disposal of obsolete POPs pesticides and other POPs waste in China	GEF	UNIDO	On going

困难挑战

解决 POPs 任重而道远

尽管近年来经过不懈努力，中国已开展了一些 POPs 削减、淘汰和控制工作，但是所能解决的 POPs 问题尚只是冰山一角。

实施中的 GEF 多氯联苯管理与处置示范项目将解决浙江一个省已识别的含多氯联苯废物问题，其它 30 个省（市、自治区）的多氯联苯问题仍亟待解决。

二恶英方面，目前仅在钢铁、造纸和医废处置行业开展了有限的案例研究，缺乏系统的最佳可行技术 / 最佳环境实践以及规模示范经验。

大量 POPs 废物和高风险污染场地已成为“环境化学炸弹”，急需无害化管理或处置。

新增 9 种 POPs 的削减和淘汰压力巨大，底数不清、替代品匮乏、管理尚不到位等问题亟待解决。

巨大资金缺口

◆根据《国家实施计划》的测算，到 2015 年中国 POPs 履约工作的资金需求约 340 亿人民币，其中增量成本部分为 139 亿人民币。

政策有待完善

◆《国家实施计划》列出了需要制定或修订的政策、法规和标准。这些工作需要开展大量调研，并充分考虑公约要求和中国实际情况。

适用技术缺乏

◆淘汰、削减和控制 POPs 是一项涉及面广、技术性强的系统工程。中国目前尚缺乏经济有效的的适用技术。

管理能力薄弱

◆ POPs 履约对于中国的政府管理部门、产业界和学术界都是较新的课题，基础工作薄弱。

公众意识淡薄

◆尽管近年来中国政府开展了一些 POPs 公众意识加强活动，但是由于资金和时间限制，尚未完全唤醒公众对 POPs 危害的认识。

Problems and Challenges

A Long March to Go in Addressing POPs Issue

Despite our unremitting effort on POPs elimination and reduction, there is still a long way to go and we are faced with various challenges.

◇ Demonstration Project on Management and Disposal of PCBs will solve the identified PCBs waste problems in Zhejiang, while PCBs problems in other 30 more provinces (cities, autonomous regions) remain unsolved.

◇ Regarding dioxin releases reduction, China has only completed limited case studies in steel, paper-making and waste incineration, a big gap in line with BAT/BEP Guidelines.

◇ Large amount of POPs waste and high risky contaminated sites need emergency actions to solve the problem of “chemical bombs”.

◇ Great pressure posed by newly added 9 news POPs. Issues like uncertain baseline, lack of alternatives and insufficient management need to be addressed urgently.

Enormous Financial Gap

▲As calculated according to NIP, up to 2015, China’s financial needs reach approximately RMB 34 billion, among which incremental operation cost amounts to 13.9 billion RMB.

Policies Need to be Improved

▲The NIP lists the policies, regulations and standards to be formulated or revised. It takes huge amount of time and experiences to accomplish this work.

Lack of Applicable Technologies

▲A systematic approach is needed for the elimination, reduction and control of POPs. Due to the lack of accumulated R&D, China lacks mature and cost effective technologies.

Weak Management

▲POPs implementation is a new issue in China. Weak basis at the early stage becomes a barrier to the highly effective implementation of the Convention.

Low Public Awareness

▲Although in recent years, MEP has carried out relevant activities to strengthen public awarenes, insufficient funds and limited time hinder the public awareness on POPs.

《国家实施计划》确定的到 2015 年的优先领域

完善政策法规体系和加强机构履约能力：

◆引进和开发 POPs 替代、最佳可行技术和最佳环境实践、POPs 废物处置和污染场地修复技术；

◆减少直至消除氯丹、灭蚁灵和滴滴涕的生产和使用；

◆完善 POPs 排放和 POPs 废弃清单；

◆促进重点排放行业应用最佳可行技术和最佳环境实践；

◆建立资金机制推动 NIP 可持续实施；

◆建立履约长效机制。

Priorities by 2015 in NIP

Improve Legislation System and Strengthen Institutional Capacity

▲Introduce and develop alternatives, BAT/BEP and technologies for waste disposal and contaminated sites remediation

▲Reduce and eliminate the production and use of chlordane, mirex and DDT

▲Verify inventories of POPs releases and wastes

▲Promote BAT/BEP in key sectors

▲Establish financial mechanism to sustain NIP implementation

▲Establish long-term mechanism for the Convention implementation

结束语

中国政府郑重承诺履行《斯德哥尔摩公约》规定的相关责任，遵循国家可持续发展战略，在公约资金支持和技术转让机制前提下，将履约要求纳入国家相关规划，建立和完善相应的法律法规和标准体系，推动应用低污染、低排放技术，建立政府为主导、企业为主体和行业、公众广泛参与的工作机制，加强监管，确保履约目标的实现。拥有一个更加繁荣、安全、无 POPs 危害的世界不仅是中国人民同样也是全人类的共同愿望。

忆往昔，我们为中国在履约方面取得的进展感到欣慰和自豪！看未来，我们清醒地认识到，持久性有机污染物的削减、淘汰和控制依然任重而道远。我们将积极吸收国际先进技术和经验，争取国际社会的资金和技术支持；同时进一步加强南南合作，与发展中国家共享 POPs 履约的经验和心得。

“长风破浪会有时，直挂云帆济沧海”，通过全世界的共同努力，我们必将迎来更加和谐、文明、无 POPs 危害的明天！

Conclusion

In line with the strategy of sustainable development, the Chinese government made a solemn promise of fulfilling the obligations specified by the Convention. With the support of the Convention's financial and technology transfer mechanisms, the requirements of the Convention are incorporated into relevant national development plans. China will continue to improve corresponding administrative systems, develop related policies and adopt measures to achieve the controlling objectives established in the NIP. It is the wish of the Chinese people and the wish of all humankind to embrace a POPs-free world with greater prosperity and safety.

Recalling the past, we feel proud of the progress that has been made in China on the Convention implementation! Looking into the future, we are fully aware that there remains a long way to go in the reduction, elimination and control of POPs. China will actively learn from the advanced international technologies and management and share our experience and knowledge on POPs management with developing countries and countries with economy in transition.

As said in an ancient Chinese poem: "Time will come for the ship to conquer the vast ocean". We believe, through the concerted efforts of the whole world, human - kind will surely embrace a harmonious, prosperous and POPs-free future!

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