The Initiative of Public-Private Partnership for Hazardous Wastes on Environmentally Sound Management in Qingdao

12 August, 2004
Qingdao, China
The Problems Facing Hazardous Waste Treating Companies and Suggestions

(Edit according to PPT)
PHD. Sun yingjie
Qingdao New World Solid Waste Treatment Co., Ltd
2004-8-12

1. The Treatment Center of Qingdao city
   - The construction of the project
   - Waste can be processed:
   - Service area:
   - Address: Jiangshan town of Laixi
   - Design process ability: 80,000 tons/a
   - Area: 200 are for the first-stage project
   - Capital: 150 millions
   - Processing technology: physical-chemical; comprehensive utilization; incineration; stabilization/immobilization; landfill

2. Main components
   - Storage incineration landfill systems
   - 3000m² storage has been built
   - Rotary kiln for the incineration, use half-dry absorption column and bagtype collector to treat the gas
   - Separate type of landfill site

Distant view of a storage facility

3. Operator of the center
   - Operator: Qingdao New World Solid Waste Treatment Co., Ltd
   - A L.t.d company Specialize in treating and the reclamation of solid waste, qualified in treating hazardous waste
   - Capital: 30millions
   - The investment on the collection and reclamation of general industry waste and the construction of landfill site has been more than 30millions.
Construction of enterprise

4. Personnel

- There are 25 technique workers in which 5 are senior engineers; 10 are engineers; a doctor and 2 are masters
- The configuration of the personnel

Major in: environmental engineering; the control and reclamation of solid waste
Chemical engineering; mechanical engineering

- Personnel
- Special: environmental engineering/chemical engineering/mechanical engineering
- Experience: personnel from government/chemical plant/enterprise
- Focus: on academic degree/professional rank, more on experience and disposition
- Bankrupt and move to another place
- Sense: smelly near the site

9. How to deal with?
- National enterprises
- Contribution to the country in the past
- Bankrupt now
- Who pay for the remediation fee?
- Government? Exploiters?
- No systemic management
- Potential danger—1dollar site in America

10. Harmony between solid waste management department
- Conflicts:
  - Problem of management and amount of HW: declaration and register
  - Problem of local plan of solid waste (Ningbo mode or national mode), actually permit problem
- Problems:
  - Execute the law strictly, the amount increases
  - Execute the law loosely, the amount reduces
- Ningbo mode: company specialize in reclamation, difficult to manage
- National mode: centers for different districts, easy to manage

11. Harmony between counterparts in the districts
- Conflicts: competition
- Problems appeared:
  - Operate over the qualification
  - Unqualified enterprises
  - Adverse competition ----- degrade the price level reciprocally
- Problems: lead to confusion of the HW market , unable to guarantee the profits of the legal enterprises
- Harmony: need government plan, ecological and harmonious
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**Public—Private Cooperation Partnership Activity**

**Thursday, 12th August 2004**

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Background and Objectives of the Activity on Developing the New Partnership with Local Authorities for the Environmentally Sound Management of Hazardous and Other Wastes

(Edited according to PPT)
Jinhui Li, BCRC in Beijing, China
August 4, 2004
jinhui@tsinghua.edu.cn

1. Basel Convention on the control of transboundary movements of hazardous wastes and their disposal

1.1 The background of the Basel Convention
Unregulated trans-boundary movements of hazardous wastes between countries, in particular, from “developed countries” to “developing countries or countries with economies in transition”

1.2 The process of adoption the Basel convention
- 1985 Preliminary work of UNEP
- 1987 Adoption of the “Cairo Guidelines”
- 1989 Adoption of the Basel Convention
- 1992 Entry into force, 5th May 1992
- 1998 Ban Amendment of Basel Convention
- 1999 Adoption of Basel Protocol on Liability and Compensation
- 2004 162 Parties
- As of 2004, 49 Parties ratified the Ban Amendment of the Basel Convention.
- (at least, 62 parties accept it can enter into force)
- There have 13 parties were agreement on the convention, 3 parties are ratification it. (Botswana, Ethiopia and Togo)

1.3 Mission of the Convention
Determined to protect, by strict control, human health and environment against the adverse effects which may result from the generation and management of hazardous wastes and other wastes.

1.4 The Main Object of the Basel Convention
- To reduce trans-boundary movements of hazardous wastes to a minimum consistent with their environmentally sound management
- To treat and dispose of hazardous wastes as close as possible to their sources of generation
- To minimize generation of hazardous wastes in terms of quantity and hazards.
1.5 Website
   • Basel Convention web;
     http://www.basel.int
   • BCRC China web:
     http://www.bcrc.cn

2. Strategy Plan for the Basel Convention
   • The Strategic Plan builds on and uses the framework of the 1999 Ministerial Basel
     Declaration on Environmentally Sound Management, as it identifies and describes those
     activities considered achievable by the Parties in partnership with all concerned and
     interested stakeholders within the agreed 10-year time frame.
   • The Strategic Plan takes into account existing regional plans, programmes or strategies,
     the decisions of the Conference of the Parties and its subsidiary bodies, ongoing project
     activities and processes of international environmental governance and sustainable
     development.

2.2 Implement the Strategic Plan Framework for the Basel Convention
   • The Strategic Plan is composed of a strategic text and Action Table comprised of short

2.3 The Aims of the Basel Convention
   • The control and reduction of transboundary movements of hazardous and other wastes
     subject to the Basel Convention.
   • The prevention and minimization of the hazardous and other wastes generation, the
     environmentally sound management of such wastes and the active promotion of the
     transfer and use of cleaner technologies.

2.4 The Strategies of the Basel Convention
   (a) To involve experts in designing communication tools for creating awareness at the
       highest level to promote the aims of the Basel Declaration on environmentally sound management
       and the ratification and implementation of the Basel Convention, its amendments and protocol
       with the emphasis on the short-term activities;
   (b) To engage and stimulate a group of interested Parties to assist the secretariat in
       exploring fund raising strategies including the preparation of projects and in making full use of
       expertise in non-governmental organizations and other institutions in joint projects;
   (c) To motivate selective partners to bring added value to making progress in the
       short-term;
   (d) To disseminate and make information easily accessible through the Internet and other
       electronic and printed materials on the transfer of know-how, in particular through the BCRCs;
   (e) To undertake periodic review of activities in relation to the agreed indicators;
   (f) To collaborate with existing institutions and programmes to promote better use of
       cleaner technology and its transfer, methodology, economic instruments or policy to facilitate or
       support capacity-building for the environmentally sound management of hazardous and other
wastes.

(g) To promote and support regional initiatives such as the Environmental Initiative of the New Partnership for Africa’s Development aimed at the environmentally sound management of hazardous and other wastes.

2.5 The Activities for 2003-2004 supporting the aims of the Basel Declaration on the environmentally sound management

Field (a) Prevention, minimization, recycling, recovery and disposal of hazardous and other wastes subject to the Basel Convention, taking into account social, technological and economic concerns.

Field (b) Active promotion and use of cleaner technologies and production, with the aim of the prevention and minimization of hazardous and other wastes subject to the Basel Convention.

Field (c) Improvement and promotion of institutional and technical capacity-building, as well as the development and transfer of environmentally sound technologies, especially for developing countries and countries with economies in transition.

Field (d) Further reduction of transboundary movements of hazardous and other wastes subject to the Basel Convention, taking into account the need for efficient management, the principles of self-sufficiency and proximity and the priority requirement of recovery and recycling.

Field (e) Prevention and monitoring of illegal traffic.

Field (f) Further development of the Basel Convention Regional Centres for training and technology transfer.

Field (g) Enhancement of information exchange, education and awareness-raising in all sectors of society.

Field (h) Cooperation and partnership at all levels between countries, public authorities, international organizations, the industry sector, non-governmental organizations and academic institutions.

Field (i) Development of mechanisms for compliance with and for the monitoring and effective implementation of the Convention and its amendments.
3. The development and origin of the partnership

- Cooperation partnership was put forward on the global environment and development conference in Brazil in 1992, at present it also looks as the new mechanism on sustainable development.

South Africa is 2002 Summit Meeting of Sustainable Development put forward the new broad participation mechanism to encourage interests groups in many ways to develop partnership and to participate in implementing sustainable development, which has got extensive approval and active response. More than 250 partnership developing proposals to implement sustainable development have been originally put forward during the meeting.

As the economic system of socialist market of our country is set up tentatively and government’s function is further changed, in a lot of places of our country, the running mechanism of the market is also introduced actively. Furthermore, the government and private department have launched their partnership in the fields of the infrastructure and public service.

What is the Public Private Partnership?

The public private partnership is the framework relation under which public industry and the private industry help each other and make joint efforts and mutual benefit in order to solve the social concern in the community. The framework of PPP is, on one hand combine public strength, utilize private resources on the other hand; both sides of the government- private undertake the risk together. Under the background of fact that serve public utilities, we define the government - private partnership any risk through which the public industry and private industry go in order to develop cooperatively together, build, run, maintain and invest in public utilities.

1) The so-called companionate relationship is cooperation between governments, governments and nongovernmental organizations, and enterprises, implementing idiographic continuable development item.
2) ‘Companionate relationship’ has positive meanings, for most problems in field of sustainable development cannot be solved only by government and need participation of all ranks.

Establish companionate relationship between Hong Kong environmental protect office and industry

- Hong Kong environmental protect office has already established companionate relationship with many industries, encouraging industries to enhance environmental protection and decrease indictments regarding pollution.
- Hong Kong environmental protect office has already successively established companionate relationship with construction industry; dietetic industry and car maintain industry, which were main objects to accused by citizen. Recently, it established the fourth companionate relationship with material management industry to control noise, waste, dust and the other pollution arose by fitment work.
4. The aim of the activity
- Consider the hazardous waste may endanger the health and environment of human seriously.
- Consider do not solve the problem of environment sound of hazardous waste only by the treatment facilities of dangerous waste disposal
- Guarantee to treat the hazardous waste by the environmental sound method through the managers of hazardous waste to establish close connection, interflow information, supervise mutually.
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- The configuration of the personnel

Major in: environmental engineering; the control and reclamation of solid waste
Chemical engineering; mechanical engineering

- Personnel
- Special: environmental engineering/chemical engineering/mechanical engineering
- Engineering
- Experience: personnel from government/chemical plant/enterprise
- Focus: on academic degree/professional rank, more on experience and disposition
5. Sound management system

- Integrated management conception: from cradle to grave
- Fields processing personnel driver escort
- Directive rules
- Precautious programme under emergent condition
- Storage Precautious programme
- Leach of hazardous waste during transporting Precautious programme
- Sewage water process plant unable to work Precautious programme

6. Sustainable development and harmonious development

- Sustainable development
Harmonious development: harmonious?
Harmonize relationship between environment and itself
Harmonize relationship inner itself

How to harmonize

Harmony with the government
- National standards: standard treatment center
- Present: no experience and technique in the country; no company with relevant experience; satisfy the national standards and set up the image of the enterprise, however, no source of technique and management experience
- Harmony: refer to the foreign experiences, copy?

Harmony with the government
- Problems with the guideline:
- The requirement to control the dioxins in the fume clean system
  - Urgent refrigeration: 600°C -200°C in one second
  - Active carbon absorption: jet or absorption tower
- Conflicts: acid gas can be absorbed by wet or half dry type, so there are two types of fume cleaning technics.
Harmony in national level
- Conflicts: ambiguity of hazardous waste list
  - Difficult to distinguish
- Harmony: to perfect the list
  - Improve the distinguish ability of the local monitoring department
  - Improve the distinguish ability and the monitoring ability of the enterprise

Harmony between local governments
- Local protection---environmental protectors
- The conformity of the present resources---only in Qingdao
  The incinerator of Kailian
    - Reusable?
    - Is it possible to reassemble in other places?
    - Is the cost of alteration reasonable?
    - Time?
    - The permission of the government?

7. The problem of polluted site
- National enterprises before
- Have to move: development of the city; the adjustment of economy; the requirement of environment protection
- The site be used to the exploitation of the city
- The site standards of city construction
- Such as Qingdao pesticide plant

8. Brief introduction
- In Sifang district which has been a part of downtown
- The house price of around about 4000-5000RMB
- History : 40 more years
- Main products: monocrotophos
9. How to deal with?

- National enterprises
- Contribution to the country in the past
- Bankrupt now
- Who pay for the remediation fee?
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- Problems: lead to confusion of the HW market, unable to guarantee the profits of the legal enterprises
- Harmony: need government plan, ecological and harmonious
12. Harmony between counterparts in the districts
- Conflicts: hard to communicate
- Problems: unable to learn from each other
- Harmony: the government and the international organizations should organize some activities

13. Harmony with the customers
- Conflicts: profit---charge for the pollution
- Problems:
  - Ostensible declaration
  - Discharge illegally
  - Transport illegally
  - Two or more account book for the declaration and register
- Harmony:
  - Change the mind of treating customers and make profits reciprocally
  - Enhance the management and the execution of the law

14. Harmony with the public
- Conflicts
  - Seems no conflict at present, however, it is impossible, the citizens nearby want to work there, however, they are not qualified
  - Social responsibilities and economic profits
- Problems: affect the operation in the future?
  - Treat some kind of waste may have no profit, ok?
- Harmony: enhancement of awareness

15. Inner harmony
- Conflicts
  - The sense of HW---the danger and distinguish; HW is dangerous but not horror, yet, HW has risk
  - Inner management, management is profit too, but no experience in HW
- Solution: Training, communication and bring in advanced management experiences
The Proposition of Developing New Partnership Relation of Environmentally Sound Treatment of Hazardous Waste

Recognizing the danger of hazardous waste to human health and the environment, for the purpose of environmentally sound treatment of hazardous waste, we propose:

- The producers should produce in clean technology, reduce the use of materials especially these which are potentially hazardous to the environment, send the hazardous waste produced to the companies who are qualified to treat.
- The collectors and transporters should ensure the human health and the safety of environment during the collection and transporting.
- The recyclers and processors should ensure the hazardous waste be utilized and processed environmentally sound.
- The managers of the government should administrate legally and enhance the management of hazardous waste
- The public should supervise the activities of the producers and the operators of hazardous waste
- The stake-holders of hazardous waste set up partnership relation

Sponsors

Asia-Pacific Regional Center of Management Training and Technology Transfer for Hazardous Waste

Qingdao Center of Solid Waste Management
An Activity on Development of Public-Private Partnerships for the Environmentally Sound Management of Hazardous
List of participants, 2004-8-12 A.M.

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