Destruction of Japanese Abandoned Chemical Weapons Discovered in China: Progress and Challenges

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Introduction

A. Japanese Abandoned Chemical Weapons (JACWs): A problem left over by the history

- Crimes committed by the former Japanese military regime against the Chinese people
- No detailed abandonment information provided
Introduction

B. JACWs: Remains a real problem to the life of Chinese people and the local environment

- Resulted in more than 2,000 casualties since the founding the PRC
- More frequent casualties reported in recent years, during the construction work and/or other activities
  - Qiqihar incident in August 2003: one dead, 41 injured

Qiqihar 2003

Lianhuapao, 2004

Tianjin, 2009, 2013
Introduction

C. Destruction of JACWs - Obligations under the CWC

- “Each State Party under takes to destroy all chemical weapons it abandoned on the territory of another State Party, in accordance with the provisions of this Convention.” (Para. 3, Article I, CWC)
- For the purpose of destroying abandoned chemical weapons, the Abandoning State Party shall provide all necessary financial, technical, expert, facility as well as other resources. The Territory State Party shall provide appropriate cooperation. (Para.15, Part IV (B), V.A. CWC)
D. Bilateral Cooperation for the purpose of destruction of JACWs

- Two Memorandums signed by China and Japan
- Cooperation and assistance have been consistently provided by China at each stage of JACW's disposal program (discovery, on-site investigation, excavation and recovery, identification and over packing, and destruction)
Fact sheet: JACWs discovered in China (1)

- JACWs have been discovered at more than 90 sites in 17 provinces, throughout China
  - Discovered in construction sites, densely populated areas, natural reserves, and in rivers and lakes as well as in off-shore waters
  - Many of the discovered JACWs are deformed, damaged, or leaking
  - To date, nearly 50,000 recovered and 330,000 yet to be recovered JACWs have been declared to the OPCW
Fact sheet: JACWs discovered in China (2)

- The largest burial site uncovered
  - **Haerbaling**: 1,300 km from Beijing - north east of China
  - An estimated 330,000 items JACWs buried
  - Recovery facility completed in 2012, and a bilateral recovery operation conducted in 2013
Fact Sheet: JACWs discovered in China (3)

- **Types of JACWs:**
  - Chemical projectiles: 75mm, 105mm, 150mm
  - Chemical mortar: 90mm
  - Chemical aerial bombs: 15kg and 50kg
  - Toxic canisters: small/medium/large gas pot
  - Containers: drum can for yellow agents
  - Misc. components: burster tubes and booster tube
Fact Sheet: JACWs discovered in China (4)

Types of agents:
- Mustard gas (Yellow Agent)
- Lewisite (Yellow Agent)
- Mixture of mustard and Lewisite mixture (Yellow Agent)
- Diphenylchloroarsine (DA) (Red Agent)
- Diphenylcyanoarsine (DC) (Red Agent)
- Phosgene (Blue Agent)
- Trichloroarsine (White Agent) (used in mixture with Blue)
Fact Sheet: On-site investigations (1)

- **Internal Identifications**
  - In the case of any reported suspected discoveries, Chinese chemical experts will be sent to the site for internal identification.
  - If confirmed by the experts, the suspected JACWs will be secured, and relevant information will be recorded and provided to the Japanese side through the diplomatic channels.
Fact Sheet: On-site investigations (2)

- **Bilateral investigations**
  - Japan, in cooperation with China, will conduct on-site investigations at a bilateral agreed time
    - to confirm the origin of suspected discoveries (appearance, X-ray etc.)
    - to seal and over pack confirmed JACWs
    - to discuss further recovery plans, if needed
Fact Sheet: JACWs Storages

- **35 Storage Facilities in operation:**
  - 10 Trust Warehouses:
    - Qiqhaer, Haerbin, Shenyang, Ningan, Yanqin, Yichun, Haerbaling, Guangzhou, Shijiazhouang, Jiamusi
  - 25 Temporary Trust Warehouses:
    - Anqing, Bayandaer, Beian, Changsha, Dalian, Datong, Handan, Hangzhou, Hulunbeier, Hunchun, Jixi, Longjin, Luoning, Naning, Nianzhishan, Luoning, Shangzhi, Shouyang, Tangshan, Tianjin, Tonghua, Wuhan, Xinyang, Yichang, Zhoukou,

- **3 Storage Facilities closed:**
  - 1 Trust Warehouse
    - Nanjing
  - 2 Temporary Trust Warehouses
    - Benbu and Hefei
Updates: The Latest Discoveries of JACWs

- JACWs were discovered at 10 different locations since the CWD 2013 (April 2013 – February 2014)
- New discoveries: Anqing, Shangzhi, Guangzhou, Wuhan, Handan, Tianjin, Xuzhou, Hanzhou, Bayandoer, Taiyuan
Updates: Details of the Latest Discoveries of JACWs

<table>
<thead>
<tr>
<th>Time</th>
<th>Location</th>
<th>JACWs Discoveries</th>
<th>Bilateral Investigations</th>
</tr>
</thead>
<tbody>
<tr>
<td>23 April 2013</td>
<td>Anqing, Jiangsu Province</td>
<td>4 items reposted</td>
<td>13-14 May 2013</td>
</tr>
<tr>
<td>26 May 2013</td>
<td>Shangzhi, Heilongjiang Province</td>
<td>26 items reported</td>
<td>1-4 Aug 2013; 14-26 Oct 2013, 12-10 Nov 2013</td>
</tr>
<tr>
<td>30 May 2013</td>
<td>Guangzhou, Guangdong Province</td>
<td>5 items reported</td>
<td>Visit: 27-29 Jun 2013</td>
</tr>
<tr>
<td>10 July 2013</td>
<td>Wuhan, Hubei Province</td>
<td>17 Items reported (13 unknown)</td>
<td></td>
</tr>
<tr>
<td>16 Aug 2013</td>
<td>Handan, Hebei Province</td>
<td>2 items reported</td>
<td>10-11 May 2014</td>
</tr>
<tr>
<td>21 Nov 2013</td>
<td>Tianjing City</td>
<td>139 reported (among 164 recovered); 501 finally recovered and secured</td>
<td>3-5 Dec 2013, 9-25 Jan 2014, 18 Feb-13 March, 21 Apr.-27 May</td>
</tr>
<tr>
<td>22 Nov 2013</td>
<td>Xuzhou, Jiangsu Province</td>
<td>17 items reported</td>
<td>24-27 Feb 2014</td>
</tr>
<tr>
<td>7 Jan 2014</td>
<td>Hanzhou, Zhejiang Province</td>
<td>5 items reported</td>
<td></td>
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<tr>
<td>10 Jan 2014</td>
<td>Bayandor, Inner Mongolia</td>
<td>1 item of 50kg yellow</td>
<td></td>
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<tr>
<td>20 Feb 2014</td>
<td>Taiyuan, Shanxi Province</td>
<td>5 items reported</td>
<td>16-19 March, 12 May-3 June</td>
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Destruction Review: The Destruction Plan

- Missed deadline for the destruction of JACWs: 29 April 2012

- The EC of the OPCW endorsed the bilateral destruction plan at its 67th session with a decision on “THE DEADLINE OF 29 APRIL 2012 AND FUTURE DESTRUCTION OF THE CHEMICAL WEAPONS ABANDONED BY JAPAN IN THE PEOPLE’S REPUBLIC OF CHINA” (EC-67/Dec. )
  - Mobile Destructions -- 2016
    - Southern route: Nanjing – Wuhan – Guangzhou
    - Northern route: Shijiazhuang – Harbin
  - Excavation, Recovery and Destruction in Haerbalng --2022
Destruction Review – Cooperation Efforts

- Bilateral cooperation is indispensable to the success of the destruction program
- Consistent efforts and assistance provided by China to the JACWs destruction program
  - Coordination with the local government
  - Destruction site preparation and ground construction
  - Speedy customs clearance procedures
  - Purchasing and transporting explosives and detonators
  - Delivering the destruction objectives
  - Decontamination support
  - On-site medical support
Destruction Review: MDF in Nanjing – Southern Route -1

- The Mobile Destruction program in Nanjing is completed
  - **12 Oct. 2010**: Start of the destruction
  - **11 June 2012**: Completion of the destruction
  - **Within 20 months**: Total of 35,681 declared JACWs destroyed
  - Destruction unit has been redeployed to Wuhan;

- **Challenges**
  - Contaminated wastes generated from the destruction process (after further treatment) are still kept at the site
  - Final resolutions to these wastes (including arsenic containing wastes) is still pending
Destruction Review:
MDF in Wuhan -- Southern Route -2

- **Status of the Facility:** Construction of the facility is almost completed.
- **Challenges:**
  - **The Plan** – “The destruction operation in Wuhan is expected to be started and completed within the year 2012. In addition to ACWs stored in Wuhan storehouse and already declared to the OPCW, those stored in storehouses in Anqing (Anhui Province), Xinyang, Zhoukou, and Luoning (Hena Province) and Changsha (Hunan Province) and already declared to the OPCW are also expected to be destroyed in Wuhan.”
  - **Reality** – The destruction operation has not started yet.
Destruction Review: MDF in Guangzhou -- Southern Route -3

- **Status of the facility:** The precise location of the destruction facility has not been bilaterally agreed.

- **Challenges:**
  - **The Plan** -- “A third MDF deployment location is expected to be Guangzhou (Guangdong Province). The Government of Japan and the Government of the People’s Republic of China are currently discussing the details including the timing for the start of the destruction operations.”
  - **Reality** – Two candidate destruction sites in Guangzhou proposed are no longer available; the third proposal is still on paper.
Destruction Review: MDF in Shijiazhuang => Haerbing - Northern Route

- Mobile destruction program in Shijiazhuang
  - 12 Dec. 2012. Began one week destruction test-run
  - 22 May – 15 July 2013: Destruction of JACWs stored in Shijiazhuang completed
- Challenges:
  - The Plan – “The destruction operation in Shijiazhuang is expected to be started and completed within the year 2012. In addition to ACWs stored in Shijiazhuang storehouse and already declared to the OPCW, those stored in storehouses in Tianjin Municipality, Tangshan (Hebei Province), and Taiyuan (Shanxi Province) and already declared to the OPCW are also expected to be destroyed in Shijiazhuang.”
  - Reality -- The destruction of JACWs stored in the surrounding area is still pending

- Mobile destruction program in Haerbing
  - The destruction site has been selected – the facility is under design
Destruction Review:
Haerbaling - the Greatest Challenges (1)

- The excavation and recovery facility completed on 30 November 2012
- Excavation and recovery operation conducted between 15 Oct. – 6 Nov. 2013
  - 258 munitions recovered – 18 confirmed as JACWs
  - Identification of 199 munitions stored at Haerbaling Trust warehouse with X-ray device - 187 confirmed as JACWs
Destruction Review: Haerbaling - the Greatest Challenges (2)

- The destruction facilities at Haerbaling will adopt both a detonation chamber and a static kiln detonation furnace as the technology for destruction.
- Challenges:
  - **The Plan.** “The excavation and recovery as well as destruction operations in Haerbaling are expected to launch within the year 2012 at the earliest.”
  - **Reality.** The destruction facilities are still under construction. The destruction operation has not started yet.
The OPCW attaches great importance to the destruction of the JACWs in China – the issue regularly reviewed by the EC, CSP and the third Review Conference;

A EC delegation led by the deputy Chair of the Council and the Director General of the OPCW visited Haerbaling in September 2013;

The current EC Chairman also visited Haerbaling in April 2014
Destruction Review: Other Challenges

- Local government and people are dissatisfied with the JACWs destruction program being repeatedly delayed

- Technical challenges:
  - solutions to those unusual discoveries
  - Recovery of JACWs under Jiamusi River, Heilongjiang Province
  - Destruction of the agents mixed with decontaminants in solidified status in Liaoyuan, Jilin Province
Conclusion

- **JAPAN**: Double efforts (budget and resources) are required to achieve early completion of the destruction of all JACWs in China in accordance with the CWC and the EC decisions
- **CHINA**: China will continue to provide all necessary cooperations for the purpose of destruction of JACWs
Thanks!
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Questions?