

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

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- Updates 2014: New discoveries and related activities
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Introduction: JACWs is 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: JACW remains a real problem to the life and property of the local people and 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: 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)



Introduction: Bilateral cooperation for the purpose of destruction of JACWs



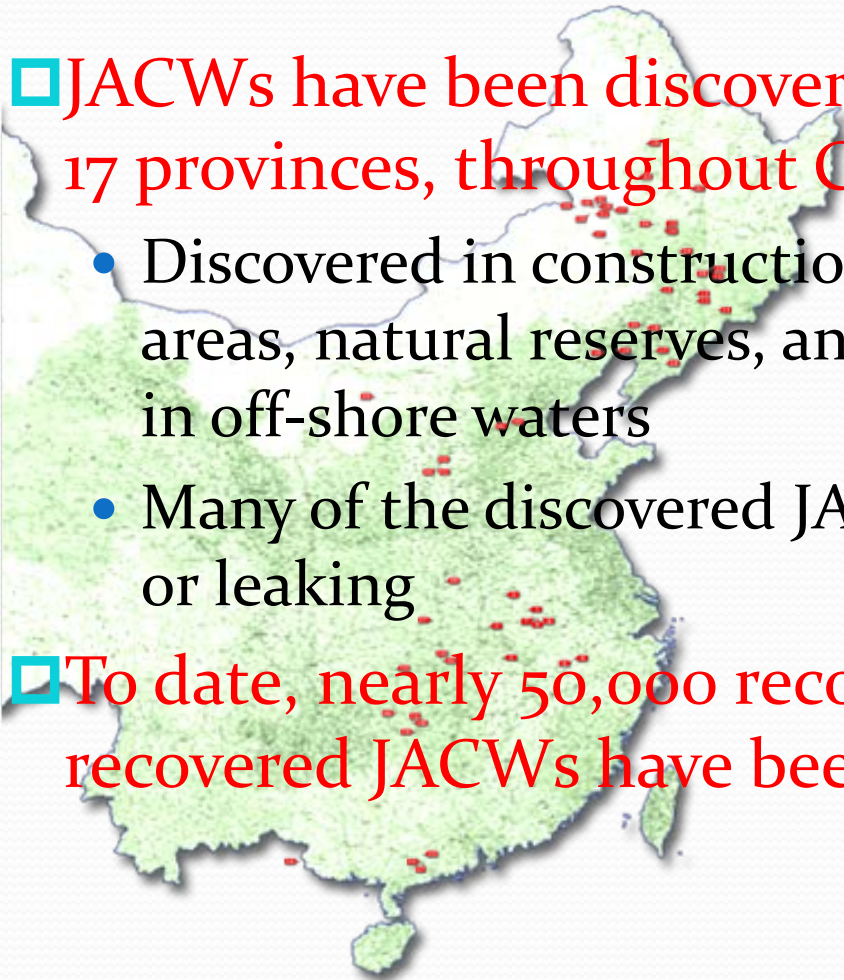
- Two Memorandums signed by China and Japan
 - Memorandum Between the Government of the Peoples' Republic of China and the Government of Japan on the Destruction of Chemical Weapons Abandoned by Japan in China (1999)
 - Memorandum Between the Government of the Peoples' Republic of China and the Government of Japan on the Destruction after 29 April 2012 of Chemical Weapons Abandoned by Japan in China (2012)
- 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 Sheets: JACWs discovered in China

□ JACWs have been discovered at more than 90 sites in 17 provinces, throughout China

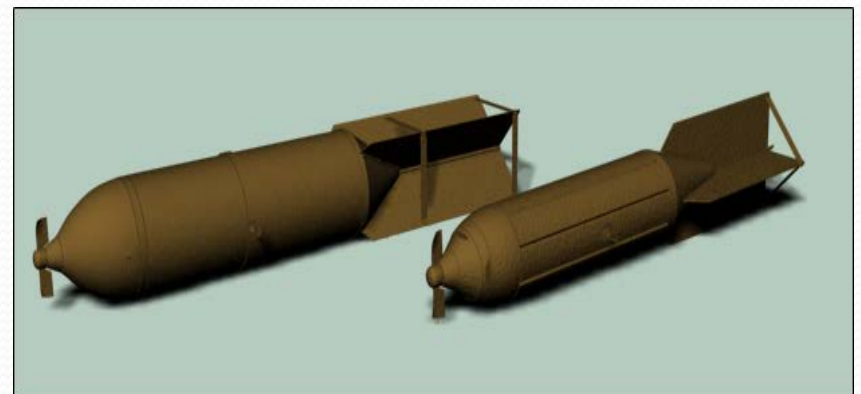
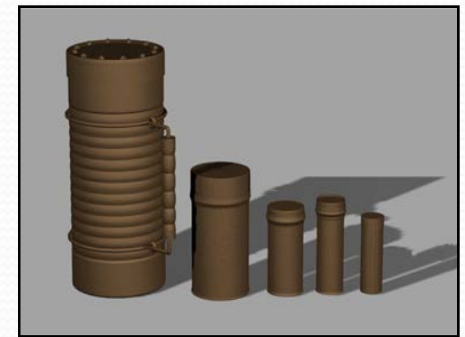
- Discovered in construction sites, densely populated areas, natural reserves, and in rivers and lakes as well as in off-shore waters
- Many of the discovered JACWs are deformed, damaged, or leaking

□ To date, nearly 50,000 recovered and 330,000 yet to be recovered JACWs have been declared to the OPCW



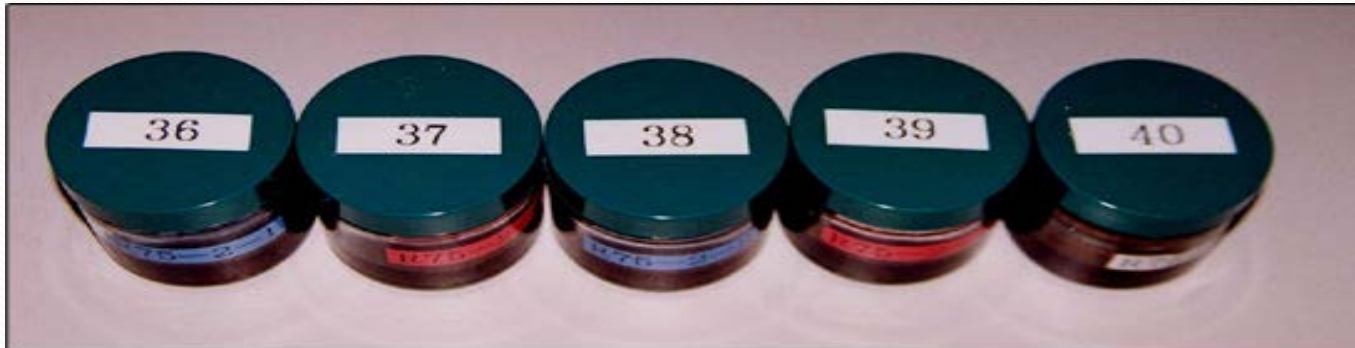
Fact Sheets: Types of JACWs discovered in China

- ❑ 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 Sheets: Types of JACW agents discovered in China

- ❑ 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 Sheets: the largest JACW burial site discovered in China

□ Haerbaling

- 1,300 km from Beijing - north east of China
- An estimated 330,000 items JACWs buried
- JACW Recovery Facility completed in 2012, and a bilateral recovery operation conducted in 2013



Fact Sheets: all JACWs discovered by accident

□ 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 Sheets: bilateral Identification and Excavation

□ Bilateral Identification

- To confirm discovered CWs as Japanese origin

□ Bilateral Excavation

- 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



Updates 2014: the new discoveries

- The new discoveries of JACWs in 2014
 - 16 bilateral investigation operations conducted at 11 different locations in 8 provinces
 - Total of 2148 JACWs discovered



Updates 2014: consolidations of JACWs

- For the purpose destruction, JACWs at 9 sites in 5 provinces were consolidated to the Mobile Destruction Facilities in Shijiazhuang and Wuhan
 - From 23 June to 20 August 2014, JACWs stored at Beijing, Tianjin, Datong, Shouyang, Tangshan and Handan were moved to Shijiazhuang MDF
 - From 16 November to 6 December 2014, JACWs stored at Luoning, Zhoukou and Xinyang were moved to Wuhan MDF
- with safe travel of 14,000 km



Updates 2014: consolidations of JACWs

- Total of 443 JACWs and 92 drums of contaminated materials were consolidated



Updates 2014: JACW Storage

□ 34 Storage Facilities in operation:

□ 11 Trust Warehouses:

- Shenyang, Haerbaling, Haerbin, Qiqihaer, Yichun, Jiamusi, Ningan, Yanqin, Guangzhou, Shijiazhuang and Nanjin
- 12,324 items of JACWs & 201,345 kg contaminated material stored

□ 23 Temporary Trust Warehouses:

- Anqing, Bayandaoer, Beian, Changsha, Dalian, Hangzhou, Hulunbeier, Hunchun, Jixi, Longjin, Naning, Nianzhishan, Shangzhi, Shouyang, Tianjin, Tonghua, Wuhan, Yichang, Taiyuan, Xinzhou, Yueyang, Jincheng, Weijin
- 2576 items of JACWs, 74 tons preliminary disposed agents and 450.7 kg contaminated material stored

□ 6 Temporary Trust Warehouses emptied

- Datong, Handan, Luoning, Tangshan, Xinyang and Zhoukou

STATUS OF JACW TRUST WAREHOUSE IN CHINA

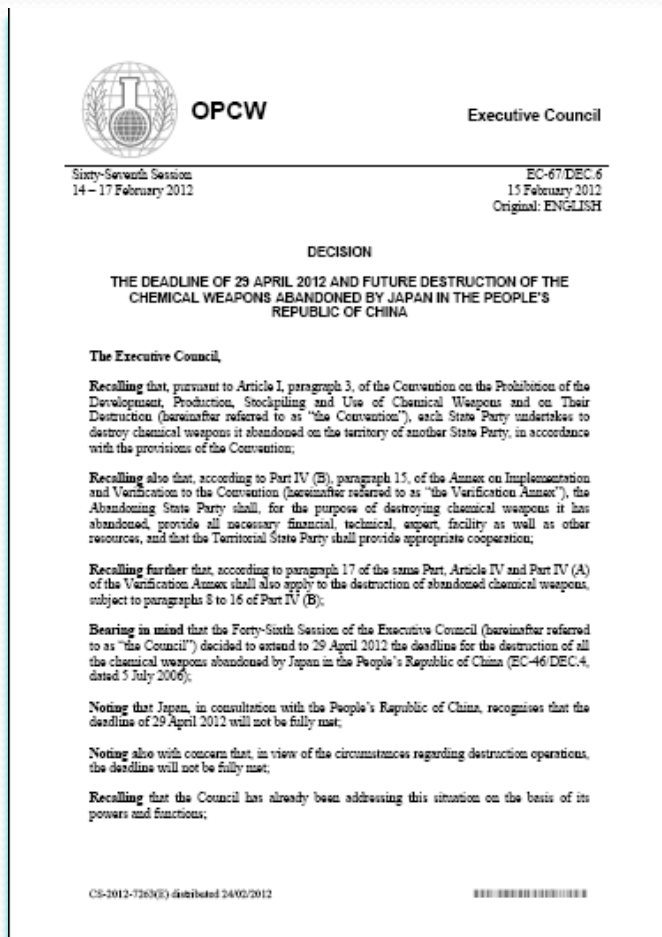


Updates 2014: OPCW inspections

- Total of 9 OPCW inspections to JACWs sites
 - 5 JACW storage inspections
 - *Haerbaling, Qiqihar, Guangzhou and Jiamusi and Shijiazhuang*
 - 2 initial visits to the Destruction Facilities
 - 1 inspection to Shijiazhuang MDF
 - 1 visit to Tianjin JACW Excavation site



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 Destructors -- 2016**
 - Southern route: Nanjing – Wuhan – Guangzhou
 - Northern route: Shijiazhuang – Harbin
 - **Excavation, Recovery and Destruction in Haerbaling --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 JACW's 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 completed**

- **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**

- **Status of the Facility:** current planned destruction completed on 8 May and the facility will be transported back to Japan after deco.
 - 30 November 2014 started destruction
 - Phase I: 23 Dec. – 25 Dec. 2014, 121 JACWs destroyed
 - Phased II: 13 April – 8 May 2015, 264 JACWs destroyed

- **Challenges:**

- Some new findings pending future identification and destruction



Destruction Review: MDF in Guangzhou

- 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 but was not timely agreed, therefore, the proposed sites are all no longer available.

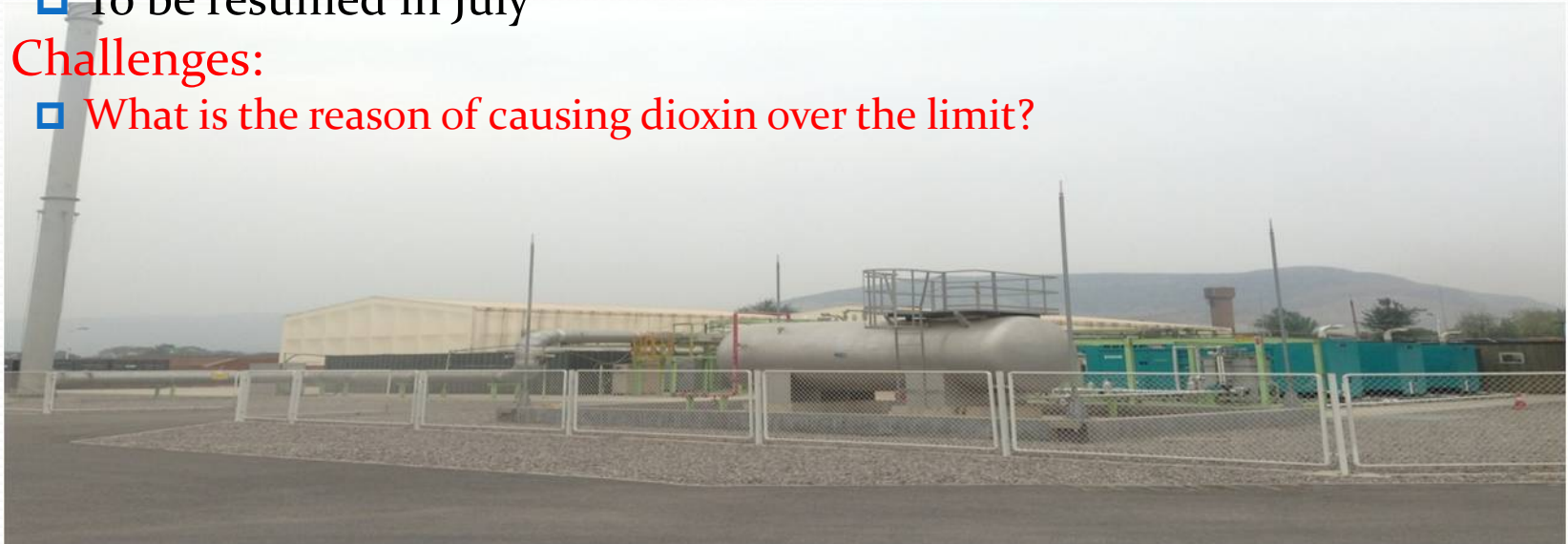
Destruction Review: MDF in Shijiazhuang

□ Mobile destruction program in Shijiazhuang

- 12 Dec. 2012. Began one week destruction test-run
- Phase I: 22 May – 15 July 2013
- Phase II: planned 13 Sept. – 8 Dec. 2014, suspended on Nov. 10 due to two independent companies all monitored dioxin exceeded the national environmental limit
- To be resumed in July

□ Challenges:

- What is the reason of causing dioxin over the limit?



Destruction Review:

Haerbaling - the Greatest Challenges (1)

- Excavation & destruction
- The excavation and recovery facility completed on 30 November 2012
- Excavation and recovery operation conducted between 15 Oct. – 6 Nov. 2013
- Destruction facility started on 30 Nov. 2014
 - Test destruction conducted 1 -5 Dec. 2014
 - Continued destruction on 20 April -4 August 2015



Destruction Review :

Haerbaling - the Greatest Challenges (2)

- Detonation chamber and a static kiln detonation furnace as the technology for destruction.
- Limited capacities for the destruction is the great challenge



Destruction Review:

Haerbaling - the Greatest Challenges (3)

- The OPCW attaches great importance to the destruction of the JACWs in China – the issue regularly reviewed by the EC, CSP and the CWC Review Conference;
- EC delegation visited Haerbaling in September 2013
- EC delegation and the DG will again visit Haerbaling from 8-10 June 2015



Destruction Review: Other Challenges

- Technical challenges:
 - Under water recoveries (*Jiamusi River, Heilongjiang Province*)
 - Destruction of solidified agents mixtures (*74 tons at Liaoyuan, Jilin Province*)
 - JACWs with fuses (*recent discovery of more than 100 JACWs with fuses in Taiyuan*)
 - Final disposal of Contaminated soil and wastes
 - Destruction of JACWs of random discoveries
- **Real Mobile Destruction Facility is of great value for JACW destruction**

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 cooperation for the purpose of destruction of JACWs



Thanks!
&
Questions?