



Chemical Weapons Convention Bulletin

Bureau of Industry and Security

Chemical Weapons Convention: 5-Year Review of Industry Implementation

As the 5th year of U.S. industry implementation of the Chemical Weapons Convention (CWC) is now complete, it is useful to look back and review the Bureau of Industry and Security's (BIS) experience with ensuring U.S. industry compliance with the CWC and assisting commercial sites in meeting their implementation requirements. The CWC landscape has changed since 2000, both domestically and internationally. This publication reviews the major lessons learned over this time period and discusses future BIS initiatives aimed at improving the CWC verification regime and increasing the efficiency of industry implementation.

Introduction

The United States ratified the CWC in 1997 and passed implementing legislation, the Chemical Weapons Convention Implementation Act (CWCIA), in 1998. In 1999, BIS published amendments to the Export Administration Regulations (EAR) implementing certain export requirements of the CWC, and also published the CWC Regulations (CWCR) implementing the declaration, report, import, notification, and inspection provisions of the CWC.

The United States submitted to the Organization for the Prohibition of Chemical Weapons (OPCW) its first industry declarations in March 2000 and completed its first domestic industry inspection in May 2000. As of February 2006, BIS has submitted approximately 7,400 declarations and amendments to the OPCW Technical Secretariat, and hosted 67 inspections. Most recently, BIS proposed revisions to the CWCR to implement OPCW Conference of States Parties decisions adopted since promulgation of the CWC Regulations, address compliance shortcomings, and reduce burdens on companies. This revised rule was published in proposed form on December 7, 2004. BIS anticipates publication of the final rule in April 2006.

Since 2000, BIS has worked to reduce the time and expense burdens of CWC declaration and inspection activities on industry sites. Declarations can now be submitted to BIS electronically and declaration forms are being streamlined. BIS is also reorganizing the structure of teams responsible for hosting inspections to reduce the number of U.S. Government personnel at industrial facilities during inspections.

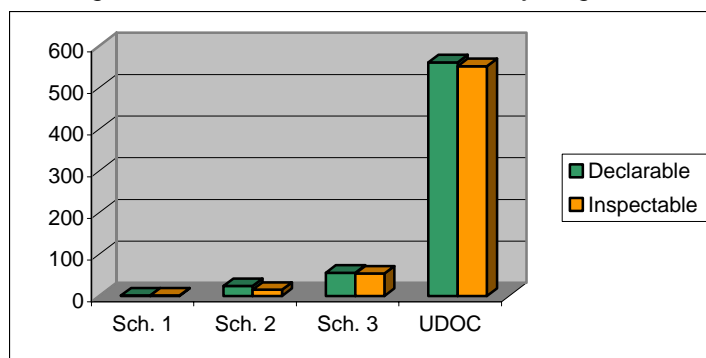
In addition, BIS is working with other U.S. Government agencies to ensure equitable implementation of the CWC

by all States Parties. Participation in the CWC has increased over the past five years and 178 states are listed as parties to the CWC as of February 2006. The member states of the OPCW continue to make progress towards the goal of universal membership to the CWC. However, less than 40% of States Parties have met the basic CWC requirement to adopt the necessary national measures to fully implement the Convention. This requirement includes enacting prohibitions on chemical weapons. Full implementation by all States Parties is a priority for the U.S. Government.

Declaration Issues

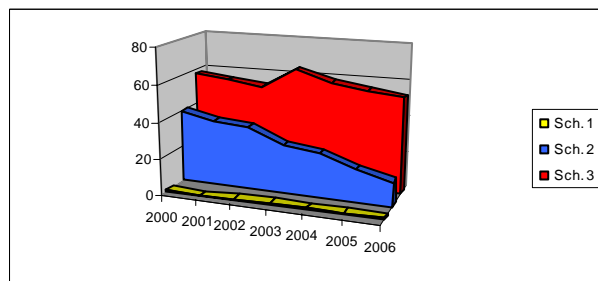
Currently, over 640 plant sites are subject to declaration in the United States, 97% of which are subject to inspection.

Figure 1: Number of U.S. Declarants by Regime



Since publication of the CWCR, BIS has seen a decline in declarable activities involving Schedule 2 chemicals. However, the number of declared Schedule 1, Schedule 3, and unclassified discrete organic chemical (UDOC) facilities has generally remained the same.

Figure 2: Number of Declarable Scheduled U.S. Facilities



Note: 2005 and 2006 information based on annual declarations on anticipated activities (ADAA).



Chemical Weapons Convention Bulletin

Bureau of Industry and Security

At the same time, consolidation within the chemical industry has continued, thus requiring facilities to submit updated information through declaration or report amendments stating ownership or company name changes to BIS outside of the usual declaration periods.

Improvement of the Declaration Process. BIS has worked diligently to reduce the time and expense burdens associated with declaration submission. Since 2000, we have processed 338 chemical determinations to assist companies in determining whether they are subject to declaration or report requirements. In addition, two significant improvements in the declaration process are:

- Implementation of the Internet-based Web-Data Entry Software for Industry (Web-DESI); and
- Proposed introduction of a streamlined form for use by UDOC facilities to declare annually that there have been no changes to activities from the previous year.

BIS released its Web-DESI tool in 2004. Prior to 2004, companies submitted either paper or electronic diskette declarations and reports to BIS by mail. Web-DESI provides companies with the option of submitting declarations and reports to BIS via the Internet in a secure environment. Web-DESI not only reduces time and paperwork for companies but also provides efficiencies to BIS by streamlining the electronic processing of declarations and reports. In 2005, 39% of facilities submitted declarations via Web-DESI, a 28% increase over 2004.

As depicted in Figure 1, UDOC plant sites represent the greatest proportion of facilities subject to declaration requirements under the CWC. In 2004, BIS proposed a new procedure to streamline the submission of information by UDOC plant sites whose activities remain constant from year to year by reducing paperwork requirements. Based on past declaration data, BIS anticipates that 25% of UDOC facilities will see a reduction in paperwork requirements once this new form becomes effective.

Records Maintenance. Verifying the consistency of declarations is an important component of the inspection process and maintaining accurate data and documentation to support declarations is critical to achieving inspection aims. It has become common practice for plant sites to manage documents electronically with the result being that not all records are kept in hardcopy format or on-site. This practice has impacted industry inspections because inspectors often request to verify data provided in electronic format with corresponding hard copy data. The CWC

require that facilities maintain all supporting materials and documentation used to prepare declarations and have access to this documentation during inspections even when stored off-site. BIS encourages industry to develop a plan through which record access is a smooth process.

Additionally, BIS has found that, in subsequent inspections, easy access to records reviewed in a previous inspection makes the process operate more quickly and efficiently. Maintaining these records in a central location can be particularly useful in subsequent inspections where there has been a change in personnel since the first inspection and new employees are unfamiliar with the issues that arose or the documents that were reviewed in the previous inspection.

BIS has found that declarations are sometimes prepared based on accounting data (e.g., sales) rather than activity data (i.e., production, processing or consumption). We have found this occurs most frequently when declarations are submitted by personnel remote from the facility (e.g., corporate personnel). As a result, declarations have been improperly prepared and subsequently have had to be amended. BIS reminds industry that declarations must be based on data from the actual activity (i.e., production, processing, or consumption) rather than accounting data. Plant sites are encouraged to amend their data collection procedures to accommodate this requirement.

Export/Import Issues

One important goal of the CWC is to control exports of CWC chemicals to non-States Parties. As the number of States Parties to the CWC has increased, exports of Schedule 3 chemicals to non-State Parties have correspondingly decreased.

In 2002, the jurisdiction of certain scheduled chemicals was transferred between the Department of State and BIS, including (see *Commerce summary of the November 27, 2002 amendments to the ITAR* on BIS's CWC website at www.cwc.gov):

- Three Schedule 1 chemicals moved from BIS's Commerce Control List (CCL) to the State Department's International Traffic in Arms Regulations (ITAR), resulting in only two Schedule 1 chemicals -- saxitoxin and ricin -- remaining subject to BIS jurisdiction with regard to export control;
- Three Schedule 2 chemicals moved from the CCL to the ITAR; and
- One Schedule 3 chemical moved from the ITAR to the



Chemical Weapons Convention Bulletin

Bureau of Industry and Security

CCL, resulting in all Schedule 3 chemicals being subject to BIS jurisdiction.

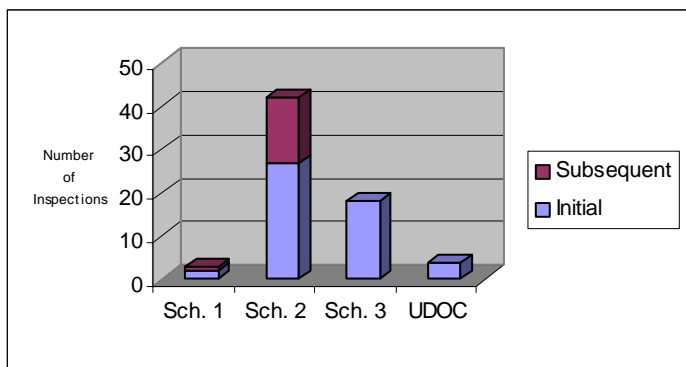
The fact of whether a chemical is subject to either the ITAR or EAR impacts export and import licensing requirements and inspection activities. The EAR contain an exception for the transfer of controlled data to OPCW inspectors during on-site verification activities. For chemicals subject to the ITAR, however, there is no exception for the release of controlled technology to OPCW inspectors without the authorization of the Department of State. U.S. Government officials authorized to make such decisions will participate on BIS host teams as necessary.

In 2004, BIS published guidance to industry on how to comply with the export and import requirements of the CWC (see *CWC Publication CWC-007- Export and Import Requirements*). BIS also provides assistance to exporters seeking guidance on obtaining end-use certificates from non-States Parties.

Inspection Issues

Since 2000, BIS has hosted 67 inspections in all four CWC chemical regimes, as depicted in Figure 3 below:

Figure 3: Distribution of CWC Inspections in the U.S.



BIS has been able to fully demonstrate U.S. compliance with the CWC at all plant sites inspected to date.

In accordance with Section 309 of the CWCIA (22 U.S.C. 6701, 6728), BIS has been collecting data on the costs of inspections. Inspected facilities report that the average cost to a company is approximately \$24,000. This is 55% less than BIS first anticipated in 1999, and the lower cost can be attributed in part to the cooperation between BIS and industry in preparing adequately and establishing efficient plans for hosting inspections.

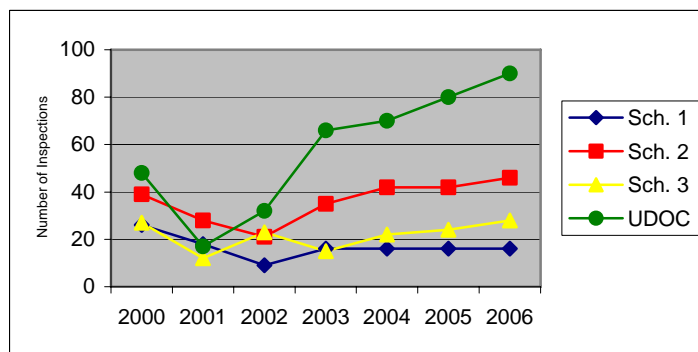
To assist in preparing for and conducting inspections, BIS has developed an extensive library of resources to provide guidance to industry (e.g., *Lessons Learned from Industry Inspections CWC-006*, *CWC Industry Inspection Preparation Handbook*, and an interactive Pre-Inspection Briefing). These resources are available on BIS's CWC website (see www.cwc.gov).

As of February 2006, BIS has conducted 81 site assistance visits (SAVs) to educate plant sites about the CWC. In addition, BIS advance teams continue to provide inspection support immediately prior to the arrival of inspection teams.

Types of Inspections. The mix of types of industrial inspections in the United States has changed during the past five years. U.S. inspections in calendar year 2000 were almost all Schedule 2 initial inspections. Now that all inspectable Schedule 2 plant sites declared to date have been inspected at least once, inspection activity has shifted more towards Schedule 3 plant sites. Seventy percent of calendar year 2005 inspections conducted in the United States were at Schedule 3 plant sites.

The OPCW has increased the number of UDOC inspections conducted annually, which has broadened the worldwide reach of verification. The trend will continue as the total number of OPCW inspections at UDOC facilities increases, a change supported by the United States to broaden the geographic distribution of inspections. Figure 4 below depicts the total number of industry inspections conducted or planned by the OPCW in 2000-2006.

Figure 4: Worldwide Distribution of CWC Inspections.



Source: OPCW (completed/budgeted inspections)

Preparation. Thorough preparation prior to an inspection leads to greater inspection efficiency and generally less time on-site. Accurate and complete record-keeping, preparation of a comprehensive pre-inspection briefing, proper delineation of plants and plant sites in accordance with the CWCR, comprehensive inspection route planning,



Chemical Weapons Convention Bulletin

Bureau of Industry and Security

and careful identification of sensitive (e.g., export control) or confidential business information prior to the inspection are critical to proper inspection preparation.

Plant Site / Plant Delineation. The way a company delineates plants and plant sites affects the content of declarations, potential scope of on-site verification activities conducted by OPCW inspection teams (i.e., access), and frequency of inspections received (if a company has declared multiple plant sites within its fence line). Improper delineation can create confusion over declarations and disagreement over the scope of inspections. Although the CWCR include definitions for these terms, elements of the definitions themselves contain undefined terms (e.g., operational control). BIS provided guidance and has worked with industry to create consistency in the application of these definitions to facilitate verification activities by OPCW inspection teams in areas relevant to the CWC (see *“Plant” and “Plant Site” Delineation Publication, CWC-009*). The methodology advocated by BIS has been incorporated at several U.S. plant sites and successfully defended during inspections.

Access Issues. In the first eighteen months of industry implementation, there were several instances of interpretational differences between the U.S. Government and OPCW inspection teams on inspection provisions that impacted verification activities (e.g., the extent of inspector access required by the CWC). These differences have since been resolved. Modifications to inspection procedures to provide for comprehensive site orientation tours and development of guidance with respect to plant and plant site delineation addressed these misunderstandings and have provided greater consistency from one inspection to another. OPCW inspection teams have also improved their practice of providing appropriate rationales for access requests in accordance with the provisions of the CWC.

The CWCR make clear that BIS host teams will determine which areas of a facility an inspection team may access, in accordance with treaty provisions. BIS works with facility personnel to develop appropriate security countermeasures (e.g., routing, shrouding) to protect confidential business information that is unrelated to the inspection purpose and to ensure that inspection activities are limited to those provided for in the CWC.

Confidential Business Information. The right to protect confidential business and other critical (e.g., export control) information unrelated to the mandate for inspections applies during all inspections. Such information may also

be protected even when related to the mandate provided alternative means can be presented to satisfy inspection aims. The importance of identifying such sensitive information to BIS before inspections begin cannot be overemphasized. BIS will also clarify in the anticipated April 2006 revisions to the CWCR that ITAR-controlled technology may not be disclosed to inspectors without express U.S. Government approval.

Compliance

BIS annually conducts compliance reviews of declarations, export licenses, end-use certificates, and inspection activities to determine whether companies have complied with the CWCR and EAR. This compliance authority will be expanded in the revised CWCR with regard to undeclared facilities.

Global Implementation of the CWC

Universality. 105 states were party to the CWC when it entered into force in 1997. As of February 2006, 178 states were party to the CWC. Clearly, in less than 9 years, the CWC has become a global norm with the addition of 71 countries that recognize the political, economic and security benefits of membership. Universal membership to the OPCW is a key objective of the organization, and one strongly supported by the United States.

Article VII Compliance. The United States strongly contends that membership to the OPCW alone is not sufficient. Therefore, the United States continues to stress the importance of universal implementation of and compliance with all CWC requirements. To date, a number of States Parties have not complied with the national implementation requirements of the CWC under Article VII (i.e., establishment of a National Authority, enactment of legislation outlawing chemical weapons, and implementation of declaration and inspection requirements).

Status of States Parties' Implementation of Article VII

Established a National Authority	86%
Adopted full legislative and administrative measures	35%
Submitted initial declaration	85%

Source: OPCW Technical Secretariat

In response, the U.S. Government led efforts at the 2002 Review Conference and subsequent Conferences of States Parties to initiate an OPCW action plan to address and remedy failures in implementation. As part of this initiative, BIS worked with its Romanian partners to develop an Implementation Assistance Programme (IAP) to help States



Chemical Weapons Convention Bulletin

Bureau of Industry and Security

Parties comply with Article VII (see www.cwc.gov/outreach.html). As of February 2006, the IAP has been distributed to more than 113 States Parties and the U.S. Government has conducted assistance visits to more than two dozen countries in South America and Africa.

Future Issues

Reducing Host Team Size. Since domestic industry inspections began in 2000, BIS Host Teams have typically been composed of 6 to 8 personnel from the Department of Commerce and the Defense Threat Reduction Agency (DTRA), in addition to a representative from the FBI as mandated by the CWCIA. In an effort to reduce the number of U.S. Government personnel on site during inspections, and utilize escort expertise gained through working with DTRA over the past five years, BIS plans to consolidate Host Team functions internally by the end of 2006. BIS estimates that the size of Host Teams will decrease by 1-2 members during inspections, thus reducing the number of U.S. Government representatives at inspected sites.

Training Support. BIS is working with the Department of State and the OPCW Technical Secretariat to ensure that inspectors receive adequate training to thoroughly and properly conduct verification activities. It is in the United States' interest that inspectors conduct inspections in a thorough and competent manner, which can result in efficiencies that may lead to shorter inspections in certain circumstances, thus reducing the burdens on U.S. industry.

Timely and Accurate Declarations from States Parties.

Submission of late, incomplete, or no Article VI (e.g., industry) declarations undermines confidence that all States Parties are in compliance with the CWC. This also puts compliant States Parties at a competitive disadvantage since only their facilities are included in the pool of declared, inspectable sites for which the Technical Secretariat plans inspection activities. BIS is leading U.S. efforts to develop a proposal that would provide greater confidence to the OPCW that States Parties are submitting accurate declarations in a timely manner, and also highlight possible ways to remedy the ongoing problem of late and/or incomplete declaration submissions.

Article VII Compliance: In an effort to enhance compliance with the CWC, pursuant to the principles of the IAP, BIS will be working with U.S. industry to develop best practices for meeting declaration, export/import, and inspection requirements to compile into an industry compliance program. The objective is to train industries in other States Parties about their responsibilities under the CWC, thereby

assisting States Parties to comply with declaration and inspection obligations.

Sampling. To date, OPCW inspection teams have conducted sampling during industry inspections only twice (neither instance occurred in the United States); both times sampling was conducted at the request of the inspected State Party. During Schedule 2 inspections, inspectors have the right to take samples in accordance with CWC procedures.

BIS has teamed with analytical chemists from the Departments of Defense and Energy to provide on-site and off-site support to U.S. host teams in the event a sample is requested. In addition, we have conducted outreach with industry on plans and preparations for taking and analyzing a sample, to include the use of "blinding" software that limits the scope of analysis in order to maximize the protection of confidential business information.

The OPCW Technical Secretariat anticipates that sampling may be utilized more routinely as a verification procedure in the future during Schedule 2 inspections. Any sample requested must comply with the CWCR and the Department of State's regulations on sample taking. Given the intrusiveness and confidentiality risks associated with sample analysis, BIS host teams will seek to ensure that verification activities are conducted in the least intrusive manner possible and employ the relevant provisions of the CWC to maximize the protection of confidential business information.

Further Information

To learn more about CWC implementation, the CWCR and CWC provisions of the EAR, or to request assistance, including a Site Assistance Visit, please visit our website at www.cwc.gov or contact BIS's Treaty Compliance Division at (703) 605-4400 or fax (703) 605-4424.