

**GAO**

**Testimony**

Before the Subcommittee on National Security, Veterans Affairs, and International Relations, Committee on Government Reform, House of Representatives

---

For Release on Delivery  
Expected at 10:00 a.m.  
Wednesday,  
September 13, 2000

**ARMS CONTROL**

**Experience of U.S.  
Industry With Chemical  
Weapons Convention  
Inspections**

Statement of Jack L. Brock, Jr.  
Managing Director, Acquisition and Sourcing Management



**G A O**

Accountability \* Integrity \* Reliability

---

---

Mr. Chairman and Members of the Subcommittee:

I am pleased to participate in your hearing on the impact of proposed compliance regimes for the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction (Biological Weapons Convention). These compliance regimes would affect a number of U.S. companies—mostly in the pharmaceutical industry but also may affect companies in the chemical, agricultural, and brewing industries. The pharmaceutical industry has expressed concern over the risk of compromising trade secrets, the potential cost of facility inspections, and the risk to corporate reputations should the public become aware that specific facilities are undergoing inspections related to biological weapons.

These concerns are similar to those expressed by companies affected by the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction (Chemical Weapons Convention) prior to its ratification.<sup>1</sup> Accordingly, you asked us to assess the experience to date of these companies inspected under the Convention. Specifically, you asked us to (1) determine how companies protect proprietary information during inspections, (2) identify any adverse publicity for companies as a result of being inspected, and (3) identify the costs to companies of being inspected.

In brief, the experience of the first seven U.S. companies that have been inspected under the Chemical Weapons Convention showed that companies were generally able to protect proprietary information, in part because of certain provisions in the Convention and U.S. law. We also did not identify any instances in which a company was affected by adverse publicity resulting from inspections, even though companies varied in how much information was provided to the public concerning inspections. Lastly, these companies reported inspection-related costs to GAO ranging from \$6,000 to \$107,000. The large variation is partly attributable to inconsistencies in components of costs included in the total cost as well as differences in the facilities being inspected.

Nevertheless, I would like to caution that our ability to draw conclusions based on company experiences under the Chemical Weapons Convention is somewhat limited. While the Biological Weapons Convention protocols

---

<sup>1</sup> The Chemical Weapons Convention is the first arms control treaty to directly affect a substantial portion of U.S. industry—specifically, over 300 companies.

---

currently under negotiation bear some similarity to the Chemical Weapons Convention in terms of requiring companies to submit information and provide access to facilities, the level of detail for reporting and intrusiveness of inspections has yet to be finalized for the Biological Weapons Convention protocols.

---

## Background

The United States ratified the Chemical Weapons Convention in 1997. The Convention (1) prohibits the development, production, stockpiling, or use of chemical weapons, (2) requires the destruction of existing chemical weapons production facilities, as well as stockpiles of weapons, and (3) establishes an inspection regime to monitor the production, use, and transfer of chemicals that could be associated with chemical weapons.

The Chemical Weapons Convention established the Organization for the Prohibition of Chemical Weapons. As part of its charter, the Organization is responsible for the inspection of government and industrial facilities to ensure compliance with the Convention. The Organization's operations are funded by contributions from countries that have ratified the Convention. For 2001, the United States will provide the Organization with 25 percent of its funds, or approximately \$5.6 million. The Organization employs over 200 inspectors from about 60 countries. Under the Convention, countries may reject specific individuals from conducting inspections on their territories. Exercising this right, the United States has blocked Cuban and Iranian nationals from participating in inspections of U.S. facilities.

The Chemical Weapons Convention, as implemented, requires companies to provide information and access to facilities based on the type and quantity of chemical a facility manufactures, uses, exports, or imports. Table 1 lists the categories of chemicals subject to the Convention.

---

**Table 1: Types of Chemicals Subject to the Chemical Weapons Convention**

Type of chemical	Description	Example
Schedule 1	Toxic chemicals that have little or no commercial use and were developed or used primarily for military purposes.	The nerve agent Sarin, which was used in the 1995 Tokyo subway attack.
Schedule 2	Chemicals that can be used to produce chemical weapons, but have commercial uses and are not produced in large quantities.	The chemical thiodiglycol is used to manufacture ball-point pen ink and is also a precursor for mustard gas, which Iraq used against Iran in the Iran-Iraq War during the 1980s.
Schedule 3	Chemicals that can be used to make chemical weapons, but also have significant commercial uses.	Phosphorus trichloride, which is used to make Sarin and insecticides.
Unscheduled discrete organic chemicals	Certain chemicals subject to the Convention that are not listed in a schedule and are used in a broad range of commercial products.	Propylene glycol, which is used to make antifreeze, and acetone, which is used in nail polish remover.

Source: GAO summary of Commerce Department and other documents.

Under the Chemical Weapons Convention, companies must provide information annually on the quantity and location of specific types of chemicals to the Organization for the Prohibition of Chemical Weapons and must, when selected, submit to facility and record inspections by a team of international inspectors. The information and inspection requirements vary according to the risk of diversion of the chemical or facility to producing chemical weapons. For example, facilities that use, produce, or store Schedule 1 chemicals above a certain threshold can expect to be inspected at least annually and are subject to the most stringent reporting requirements. Other facilities may be inspected less frequently, based on the risk of diversion.

There are three types of inspections: initial, routine, and challenge. Initial and routine inspections verify the information provided to the international body as well as the absence of Schedule 1 chemicals at certain facilities. In the event that a signatory to the Chemical Weapons Convention is suspected of violating the Convention, a challenge inspection may take place. A challenge inspection may occur with very little notice and is not limited to those facilities that have submitted information to the Organization for the Prohibition of Chemical Weapons. To date, no challenge inspections have occurred.

---

## Similarities and Differences Are Likely to Exist Between the Chemical and Biological Weapons Conventions

There are likely to be broad similarities between the Chemical Weapons Convention and the Biological Weapons Convention protocols. Such similarities may include requiring companies to (1) submit information about facility operations to an international governing body, (2) provide international teams access to facilities, and (3) permit challenge inspections of facilities suspected of noncompliance. However, many of the details of the Biological Weapons Convention protocols have yet to be agreed upon and could result in significant differences between the two Conventions. For example, it is still unknown whether companies will be required to submit confidential business information to a governing body or what degree of access companies will be required to provide international teams under the Biological Weapons Convention protocols. The Chemical Weapons Convention requires companies to submit confidential business information to the Organization for the Prohibition of Chemical Weapons and requires companies to provide a level of access necessary to verify information provided to the Organization, including the review of production records and taking of samples for chemical analysis.

---

## Confidential Business Information Has Been Protected

Protecting confidential business information—that is, trade secrets or privileged commercial or financial information—has been an ongoing concern of U.S. companies in complying with the Chemical Weapons Convention. Similarly, protecting such information is a major concern for the pharmaceutical industry. For example, in the pharmaceutical industry, a sample of the product may be sufficient to reveal enough confidential business information for a competitor to gain an advantage. Nevertheless, we found that chemical companies believe that they have been able to protect their proprietary information, in part because of provisions within the Convention and U.S. law<sup>2</sup> and through extra measures taken by companies before and during inspections.

The Chemical Weapons Convention prohibits inspectors from disclosing confidential information they obtain during the course of their duties to unauthorized individuals. Furthermore, inspectors, like all employees of the Organization for the Prohibition of Chemical Weapons, are required to sign secrecy agreements that cover the period of their employment plus 5 years. If an allegation is made that an inspector or other Organization employee has violated the obligation to protect confidential information, the Organization must investigate. If the allegation is substantiated, the Organization can impose punitive and disciplinary measures. For serious breaches of confidentiality, the inspector's or other employee's immunity

---

<sup>2</sup> Chemical Weapons Convention Implementation Act of 1998 (22 USC 6701 *et seq.*).

---

may be waived by the Organization, which could result in that individual being subject to criminal or civil penalties in the affected country.

The U.S. company officials that we spoke with believe that they have been able to adequately protect confidential business information while satisfying the inspectors that they are in compliance with the Convention. In fact, the Convention itself affords companies some flexibility in taking measures to protect confidential business information, provided they can still demonstrate compliance. In particular, companies have taken specific steps to identify what constituted confidential business information prior to inspection and have removed or covered specific articles to prevent revealing such information. For example:

- In one case, a company removed barrels of chemicals that were not related to the inspection from the production area to a storage room that the inspectors would not have access to. In the view of company officials, identification of the chemicals in the barrels could have revealed confidential business information to the inspectors.
- A company covered sections of pipes in the production room that identified what chemicals were being used during the production process but were not related to the inspection.
- Another company covered up procedures manuals that contained sensitive information about production processes.
- Generally, companies maintained supervision of the inspectors by ensuring that they were continuously escorted while in the facility.

In other cases, companies have had to take extra measures to protect information while satisfying the needs of the inspectors and meeting the provisions of the Convention. For example, to protect production processes, one company ensured that all computer screens in the control room of the facility showed non-sensitive information before allowing inspectors into the room. Some companies have had to create summary sheets of production information for the inspectors because the raw data would reveal confidential business information.

In addition, U.S. implementing legislation provides for the protection of confidential business information and severe penalties for violations on the part of any current or former U.S. government employee. Section 404 of the Chemical Weapons Convention Implementation Act of 1998 exempts confidential business information from public release under the Freedom of Information Act, but permits disclosure to the Organization for the Prohibition of Chemical Weapons, congressional committees or

---

subcommittees of jurisdiction, and law enforcement agencies under special circumstances. The law also provides for fines and imprisonment in the event of willful disclosure of confidential business information.

Federal agencies also provide assistance to help companies that are inspected protect confidential business information. The Commerce Department has sponsored seminars to explain the requirements of U.S. regulations implementing the Chemical Weapons Convention and to suggest how to protect confidential business information. Commerce and other agencies also provide site assistance visits to help companies prepare for inspections. Moreover, during inspections, Commerce and Defense Department staff escort the inspectors at all times to prevent unauthorized access to facilities and information and a Federal Bureau of Investigation official is on site for counterintelligence purposes.

---

## No Adverse Publicity From Inspections Reported

Many companies have been concerned about negative public reaction to knowledge that a company has been inspected under the Chemical Weapons Convention. For example, neighboring communities might be alarmed that a chemical produced nearby could be used to create a weapon. As one industry official said, the worst case scenario would be a minor technical error resulting in a headline stating that the company failed a chemical weapons inspection. To date, however, U.S. companies we spoke with have indicated that there has been no adverse publicity related to the inspections under the Chemical Weapons Convention.

To prevent adverse public reaction, chemical companies have chosen to either (1) not publicize the fact that their facility is subject to inspection or (2) initiate a dialogue with surrounding communities about inspections. In choosing the first approach, one company stated that the local community in the past has objected to the presence of the facility near houses, and that it did not want any more negative publicity. In opting to inform the public about impending inspections, one company said that hiding the information would be more damaging than addressing the concerns of the community. Federal agencies have accommodated company decisions in both approaches.

---

## Cost of Inspections Vary

We obtained cost data from the first seven companies to be inspected and found that they identified inspection costs ranging from \$6,000 to \$107,000. We were not able to audit these costs. However, we found that factors affecting this variation include the types of costs companies are reporting, how they calculate those costs, and differences in the facilities inspected.

---

The Chemical Weapons Convention Implementation Act of 1998 requires the President to submit an annual report to the Congress on inspections made under the Convention. The report must include such information as the number of inspections conducted in the United States during the preceding year, the cost to the United States for each inspection, and the total cost borne by U.S. industry in the course of the inspections. In implementing this Act, Commerce regulations require facilities that have undergone an inspection to report total cost related to the inspection to the Bureau of Export Administration within 90 days of the inspection. Although the regulation states that the reports should identify categories of costs if possible, Commerce has reiterated that the only mandatory reporting is for total cost. Four companies told us that they have submitted inspection-related cost data to the Commerce Department.<sup>3</sup>

One reason for variances and inconsistencies in costs being reported is that Commerce did not provide detailed guidance to companies concerning what types of costs should be included or how to calculate inspection-related costs, which may limit the usefulness of the cost data. As a result, companies are including different types of costs as they prepare cost data to submit to Commerce. For example, one company included all costs related to compliance with Commerce's regulations on the Chemical Weapons Convention, including the costs of preparing the initial report to the Organization for the Prohibition of Chemical Weapons. The company also included the cost of briefing headquarters executives on the results of the inspection. Another company included costs related to an internal practice inspection prior to receiving notification of the actual inspection. Other companies limited their reported costs to those related to the inspection from the time that Commerce notified the facility of the impending inspection until the inspectors departed. In addition, companies varied in the other costs identified. For example, two companies identified only labor and travel costs, whereas other companies included the use of conference rooms, faxes, photocopiers, and delivery services.

The regulation also did not explain how companies should calculate costs. For example, all companies included labor costs, but calculated them differently. Some companies applied the number of hours employees spent on inspection-related tasks to actual wages, while others used an average or standard hourly rate. Further, in calculating labor rates, most companies included the cost of employee benefits in addition to salaries

---

<sup>3</sup> Of the seven companies we spoke with, the three who have yet to report costs to Commerce are still within the 90-day period.



---

while one did not. Some companies tried to directly track costs, while others estimated costs for reporting purposes. Two companies established a cost code for the inspection in order to capture costs. Another company said that creating a separate cost code for inspection-related activities would have been an unnecessary cost because of the infrequent nature of the inspections.

To some degree, the variances in the costs that facilities incur as a result of these inspections may be attributable to differences among the facilities themselves and how the facilities prepared for inspections. For example, a company that is involved in the production and consumption of multiple chemicals subject to inspection may require more time and effort to prepare for the inspection than a company that only uses one chemical subject to inspection. For safety reasons, one company decided to suspend its operations during the inspection, which resulted in lost business that was estimated and included as a cost. Other companies did not suspend operations. Two companies hired outside legal counsel to assist in the preparation and conduct of the inspection, while other companies relied on in-house legal services. Also, one company provided training to facility personnel who could come in contact with inspectors to prepare them for the inspection, which was included as a cost incurred by that company.

In addition, the costs reported by the companies may not be representative for the entire industry. As of September 1, 2000, only nine U.S. industry facilities had been inspected under the Chemical Weapons Convention. The first inspection occurred in May 2000. The facilities that have been inspected to date use or produce Schedule 1 or Schedule 2 chemicals. As these chemicals have the highest risk and the most stringent inspections, the experience of these facilities may not be applicable to facilities with Schedule 3 and unscheduled discrete organic chemicals. For example, the Chemical Weapons Convention permits inspections related to Schedule 2 chemicals to last as long as 96 hours (4 days), but limits the inspections related to Schedule 3 chemicals to 24 hours. As a result, the cost of hosting a Schedule 3 or unscheduled discrete organic chemical inspection will likely be less. The frequency of inspections may also have an impact on future costs. For example, all Schedule 1 facilities are subject to frequent inspections and therefore may experience cost decreases as they become more familiar with preparing and hosting inspections. However, other facilities will be inspected less frequently and therefore may not experience such cost decreases.

It should be noted that in addition to the costs borne by the companies, the U.S. government and the Convention's governing body also incur costs.

---

For example, for the seven inspections we reviewed, the U.S. government paid the salaries and travel costs for federal agency personnel who went to facilities to help companies prepare for inspections and to escort the inspectors. The cost of inspectors' salaries, transportation to the United States, and accommodations during the inspection are paid by the Convention's governing body, which is supported by member states.

---

In conclusion, though there are parallels between the two conventions, the relevance of our findings will largely depend on the specifics that are agreed upon under the Biological Weapons Convention protocols. This is particularly so with regard to the risk to confidential business information since issues such as the level of detail of reporting and the level of intrusiveness of proposed inspections have yet to be resolved. The risk to corporate reputations from adverse publicity, on the other hand, is likely to be similar to that experienced by chemical companies under the Chemical Weapons Convention. Lastly, while the types of inspection costs will most likely be similar to those incurred by the chemical industry under the Chemical Weapons Convention, the costs may well be different because of differences between the companies. Further, the usefulness of reporting costs will depend on the consistency and completeness of the data reported.

Mr. Chairman, this concludes my statement. I would be happy to answer any questions you or the other Subcommittee Members may have. Major contributors to this testimony include Katherine V. Schinasi, Thomas J. Denomme, Johana R. Ayers, Cristina Chaplain, Delores Cohen, Dianne D. Guensberg, Paula J. Haurilesko, Stephanie J. May, David Merrill, and William T. Woods.

---

## Ordering Information

### *Orders by Internet*

For information on how to access GAO reports on the Internet, send an e-mail message with "info" in the body to:

Info@www.gao.gov

or visit GAO's World Wide Web home page at:

<http://www.gao.gov>

---

## To Report Fraud, Waste, and Abuse in Federal Programs

### *Contact one:*

Web site: <http://www.gao.gov/fraudnet/fraudnet.htm>

E-mail: [fraudnet@gao.gov](mailto:fraudnet@gao.gov)

1-800-424-5454 (automated answering system)