

7. Chemical Precursors and Associated Equipment, Technology and Software (Sections 742.2, 744.4 and 744.6)

Export Control Program Description And Licensing Policy

The Bureau of Export Administration (BXA) maintains export controls over certain chemicals, equipment, materials, software, technology and whole plants to further U.S. foreign policy opposing the proliferation and use of chemical weapons.¹ These controls are implemented in coordination with the Australia Group (AG), an informal forum of 30 nations cooperating to halt the proliferation of chemical and biological weapons. (See table in Appendix II for complete list of members.) BXA also has primary responsibility for overseeing the compliance of industry with the Chemical Weapons Convention (CWC), which bans the development, production, stockpiling, and retention of chemical weapons, and provides for an extensive verification regime.²

The licensing requirements for chemicals, equipment, materials, software, technology and whole plants are as follows:

A. A license is required for the export to all destinations, except AG member countries, for certain chemicals that may be used for toxic chemical agents; relevant process control software; technology for their use, production and/or disposal; and facilities designed to produce them. (Chemical warfare agents deemed to have direct military application are controlled by the State Department under the International Traffic in Arms Regulations.)

A license is required for the export to specified destinations of certain chemical manufacturing facilities and equipment, toxic gas monitoring systems and detectors that can be used in the production of chemical warfare agents, and technology for the use of such items. The countries to which these licensing requirements apply are indicated in Column CB:3 of the Commerce Country Chart, Export Administration Regulations (EAR) , Part 738, Supplement No. 1.³

A license is also required for the export of any commodity, technology, or software, when the exporter knows that it will be used in the design, development, production, stockpiling, or use of chemical weapons in, or by, specified countries. (Country Group D:3, EAR, Part 740, Supplement No. 1.⁴) BXA may inform the exporter or reexporter that a license is required due to an unacceptable risk that the items will be used in, or diverted to, a chemical weapons project anywhere in the world.

No U.S. person may export, reexport or transfer any item without a license, when that person knows that the item will be used in the design, development, production, stockpiling or use of chemical weapons in, or by, a country listed in Country Group D:3. No U.S. person may knowingly support an export, reexport or transfer covered by these controls. Support could mean any action, including financing, transportation, or freight forwarding.

No U.S. person may, without a license, perform any contract, service or employment knowing that it will directly assist in the design, development, production, stockpiling or use of chemical weapons in, or by, a country listed in Country Group D:3.

B. Applications for licenses will be considered on a case-by-case basis to determine whether the export would make a material contribution to the design, development, production, stockpiling, or use of chemical weapons. When an export is deemed to make such a contribution, the application will be denied.

Analysis of Control as Required by Section 6(f) of The Act

A. The Purpose of the Control

The purpose of these controls is to prevent a U.S. contribution to, and to support multilaterally coordinated efforts to control, the proliferation and use of chemical weapons. They also provide regulatory authority to control the export of any item from the United States when there is a significant risk that it will be used for chemical weapon purposes. These controls implement some of the measures specified in Executive Order 12735 of November 16, 1990, and its successor, Executive Order 12938 of November 14, 1994, and the Enhanced Proliferation Control Initiative (EPCI) announced by President Bush on December 13, 1990.

These controls advance U.S. implementation of multilateral export control commitments made by members of the AG to further non-proliferation objectives. The AG works to accomplish this objective through the harmonization of export controls, the exchange of information, and other diplomatic means. In addition, these controls assist the United States in implementing its obligation under the Convention on the Prohibition of the Development, Production, Stockpiling, and Use of Chemical Weapons and on their Destruction (the Chemical Weapons Convention, or CWC) not to assist anyone, in any way, in chemical weapons activities. The controls also support the goals of the 1925 Geneva Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or other Gases, and of Bacteriological Methods of Warfare, which prohibits the use of chemical or biological weapons.

B. Considerations and/or Determinations of the Secretary of Commerce

1. **Probability of Achieving the Intended Foreign Policy Purpose.** The chemicals, equipment and technology covered by these controls have many commercial uses and are widely available from foreign sources. Many of the major sources of these items are in industrialized countries that are members of the AG. While it is not expected that export controls alone can prevent the proliferation of chemical weapons, these controls strengthen U.S. efforts to stem the spread of such weapons. Accordingly, the Secretary has determined that these controls are likely to achieve the intended foreign policy purpose.

2. Compatibility with Foreign Policy Objectives. In extending these controls, the Secretary has determined that the controls are compatible with the foreign policy objectives of the United States. The United States has a strong interest in remaining in the forefront of international efforts to stem the proliferation of chemical weapons. These controls are compatible with the multilateral export controls for chemicals and related equipment and technology agreed to by the AG. Moreover, the United States has a binding international commitment under the CWC to the complete prohibition and elimination of all weapons of mass destruction. The Administration considers full implementation of the CWC a high priority for continuing U.S. leadership in the non-proliferation arena.

3. Reaction of Other Countries. The Secretary has determined that the reaction of other countries to these controls by the United States is not likely to render the controls ineffective in achieving the intended foreign policy purpose or to be counterproductive to U.S. foreign policy interests. In 1997, the United States continued to consult with the AG and other nations on the problem of chemical weapons proliferation and terrorism. The AG continues to urge all countries to take necessary steps to ensure that they are not contributing to the spread of chemical weapons. Some developing country governments believe that AG export controls discriminate against less industrialized nations by depriving them of goods and assistance in the field of chemical and biological technology. The United States does not agree with this position, which it believes the evidence does not support (see next section, Economic Impact on United States Industry). In international fora the United States has sought to dispel this perception by clarifying the purpose of the controls and demonstrating that very few export requests are denied.

4. Economic Impact on United States Industry. The Secretary has determined that the potential impact of these export controls on the U.S. economic position is minimal as shown by export licensing statistics. In FY 1997, 675 license applications were approved for export and reexport of controlled chemical precursors with a value of \$855 million. Only five applications were denied, with a value of \$5 million. For chemical production equipment, 76 export license applications were approved valued at \$6 million, while no export license applications were denied.

These statistics also demonstrate that AG export controls do not undermine the legitimate economic or technological development of any country. Rather, they are consistent with Article I of the CWC which prohibits assistance of any type to any country's CW program.

5. Enforcement of Control. Chemical controls pose problems for Commerce enforcement personnel because of the vast size, dispersion, diversity, and specialized nature of the dual-use chemical industry. In addition, enforcement officers can be exposed to personal safety risks when seizing and inspecting chemical materials.

To meet the challenge of effective enforcement of these controls, Commerce has redirected resources toward preventive enforcement, with particular attention to Shipper's Export Declarations, to ensure that the products labeled "No License Required" (NLR) are in fact eligible for unlicensed shipment. Also, Commerce conducts an extensive ongoing outreach program to

educate companies about export controls, and to heighten their awareness of "red flags" that may indicate potentially risky transactions. This program is an important component of Commerce's efforts to prevent companies from illegally exporting dual-use products which can be used to make chemical weapons.

C. Consultation with Industry

The Department has sought the views of a broad cross-section of industry by consulting with various advisory committees, trade associations and individual firms. Planning for implementation of the CWC has provided a significant opportunity for interaction with the chemical industry. (See CWC under Section E, "Alternative Means".)

D. Consultation with Other Countries

These U.S. controls are consistent with the multilateral export control criteria of the 30 member-nation AG, which includes many of the world's major chemical producers and traders. South Korea was the only country to join the AG 1997. A number of non-AG countries--including Bulgaria, Russia, and Ukraine--have taken steps to adopt AG-type controls. The United States continues to encourage harmonization of export control provisions among AG participants to ensure a level playing field for U.S. exporters. In accordance with our AG commitments, BXA revised the Commerce Control List (CCL) on February 12, 1997, which will reduce the licensing burden on U.S. exporters by simplifying export controls on chemical mixtures that contain relatively small amounts (traces) of controlled precursor chemicals.

At the October 1997 AG session, the members agreed to another change in the chemical mixtures rule that will eliminate the use of the solvent free basis for calculating the percentage of controlled chemical in the mixture, while still providing measures against the misuse of such mixtures by proliferators. This change simplifies the mixtures rule and provides a substantial liberalization in the amount of chemical precursor that can be shipped in a mixture.

E. Alternative Means

The United States continues to address the problem of the proliferation of chemical weapons on a number of fronts. Direct negotiations with countries intent on acquiring chemical weapons are not likely to prevent the use of U.S.-origin materials in such activities, nor are such negotiations likely to affect the behavior of these countries.

Alternative means to curtail the acquisition and development of chemical warfare capabilities, such as diplomatic negotiations, do not obviate the need for controls. The following are some examples of additional means that the United States has used and will continue to use in an attempt to curb the use and spread of chemical weapons:

- o U.S. legislation: The Chemical and Biological Weapons Control and Warfare Elimination Act of 1991 (Title III, Pub. L. 102-182) provides for the imposition of sanctions on foreign entities and countries for certain kinds of chemical and biological weapons related activity. Sanctions have been imposed on certain entities for chemical weapons-related activities;
- o The Chemical Weapons Convention: As another tool for stemming the proliferation of chemical weapons, the CWC imposes a global ban on the development, production, stockpiling, retention and use of chemical weapons (CW) and supports the economic viability of the U.S. chemical industry. The CWC also prohibits the direct or indirect transfers of CW as well as restricting trade in chemicals to non-Parties.

The Department has made significant progress in planning for the implementation of the CWC. During this period, the Department has worked closely with chemical industry associations, including the Chemical Manufacturers Association and the Synthetic Organic Chemical Manufacturers Association, on CWC industry-related and policy issues. In addition, the Department has participated in international fora to negotiate positions which minimize burdens and maximize protections to industry.

Both houses of Congress have passed CWC implementing legislation, and a law is expected to be enacted in early 1998. Implementation of the CWC will require Commerce to revise the Export Administration Regulations accordingly.

F. Foreign Availability

Past reviews conducted by Commerce revealed that there was availability from non-AG countries for a wide range of AG chemical precursors and production equipment. Some producing countries have export controls on certain AG-controlled items. Non-AG suppliers of precursors and/or related production equipment include Brazil, Chile, Colombia, India, Mexico, China (PRC), South Africa, the countries of the former Soviet Union, Taiwan, Thailand, and Turkey. However, most of these countries have signed the CWC and will take steps under this treaty to prevent CW proliferation.

ENDNOTES

1. *Anti-terrorism controls also apply to exports of these items to countries designated as state sponsors of terrorism by the Secretary of State.*
2. *The CWC was ratified by the United States on April 25, 1997 and entered into force on April 29, 1997. As of September 30, 1997, 100 nations were States Parties to the treaty.*
3. *As of the date of submission of this report, the countries in the Commerce Country Chart CB column 3 included Afghanistan, Armenia, Azerbaijan, Bahrain, Belarus, Bulgaria,*

Burma, China (PRC), Egypt, Georgia, India, Israel, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Lebanon, Moldova, Mongolia, Oman, Pakistan, Qatar, Russia, St. Kitts & Nevis, Saudi Arabia, Syria, Taiwan, Tajikistan, Turkmenistan, the Ukraine, the United Arab Emirates, Uzbekistan, Vietnam, and Yemen.

4. *As of the date of submission of this report, the countries in Country Group D:3 included Afghanistan, Armenia, Azerbaijan, Bahrain, Belarus, Bulgaria, Burma, China (PRC), Cuba, Egypt, Georgia, India, Iran, Iraq, Israel, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Lebanon, Libya, Moldova, Mongolia, North Korea, Oman, Pakistan, Qatar, Russia, Saudi Arabia, Syria, Taiwan, Tajikistan, Turkmenistan, the Ukraine, the United Arab Emirates, Uzbekistan, Vietnam, and Yemen.*