

## **ELEMENT 6: CHEMICAL & BIOLOGICAL WEAPONS SCREEN**

**A system for assuring compliance with restrictions on prohibited chemical and biological weapons end-uses/end-users. (General Prohibitions Five & Seven)**

**OBJECTIVE:** To ensure that transactions do not involve prohibited chemical and biological weapons end-uses/end-users without authorization from the U.S. Government.

**PROCEDURE:** The EMS Administrator may wish to establish a procedure for complying with chemical and biological weapons (CBW) restrictions in which the individual responsible for the check has access to the relevant information.

This screen is designed for use after a firm has determined that, based on a CCL classification of the item being transferred, NLR or a License Exception could normally be used for the export, or the item is classified as EAR99 but is going to a CBW end use/user. General Prohibition Five found in Part 736 of the EAR prohibits the export/reexport to prohibited end-uses or end users. Under this prohibition, a firm may not, knowingly export or reexport any item subject to the EAR to a chemical and biological weapon end user or end-use that is prohibited by Section 744.4 of the EAR. General Prohibition Seven requires a U.S. person to obtain a license if engaging in any activities described in Section 744.6(a) or (b) of the EAR which prohibits the performance, of certain financing, contracting, service, support, transportation, freight forwarding, or employment that will assist in certain proliferation activities. This screen will help exporters determine whether a license is required, based on the destination and the activities of the end-user.

### **Screening Procedures**

BXA recommends that the CBW screen be performed on a transaction basis since the check relates to the appropriateness of the items being requested as well as the customer's shipping instructions. The screen may be performed using the CBW checklists provided on the following attachments and any information included in the firm's customer file. Since orders may be revised while in process, it is important that all employees involved in international sales and order processing activities be trained to recognize the CBW indicators.

A well-documented customer file noting each customer's usual activities and orders would be helpful in screening new orders. Such a file would be updated whenever new information on a customer became available. The customer file would reflect changes in licensing requirements due to any CBW-related information (i.e., license required because of customer's new

CBW-related activities). New customers would be screened, and a file created, before placing the new customer on the firm's approved customer list. New information on a customer may come from many sources, including government, industry, the media or from the actual customer, as when the customer changes activities, indicates a new end-use or end-user, requests a change in an existing order or furnishes replies to the firm's inquiries.

### **Documentation of Screen**

The CBW check should be documented. Documentation consists of noting the presence or absence of CBW-related indicators, the name or initials of the person performing the screen and the date. The CBW check may be documented on the individual order or in the firm's customer file whenever new information on the customer becomes available.

### **Screening Levels**

The firm may complete the CBW check more efficiently if performed in the following sequence which is designed to limit the levels of analysis.

#### **Level 1**

- Is the item controlled for CBW reasons?
- If yes, is the transaction eligible for NLR or a License Exception?
- If no, apply for a license.
- If yes, proceed to Level 2.

#### **Level 2**

- Have you been "informed by" the Bureau of Export Administration (BXA) as described in Section 744.4(b), that a license is required or is the end-user/customer on the Entity List?
- If yes, a license application must be submitted to BXA and a License Exception may not be used.
- If no, proceed to Level 3.

#### **Level 3**

- Is the customer located in a destination listed in Country Group D:3 in Supplement 1 to Part 740, of the EAR?

- If no, a License Exception may be used provided no other aspect of the transaction requires a license.
- If yes, proceed to Level 4.

#### **Level 4**

- Will the items be used in or by a country listed in Country Group D:3 in Supplement 1 to Part 740 in the design, development, production, stockpiling, or use of chemical or biological weapons?
- If yes, a license is required.
- If no, NLR or a License Exception may be used provided no other aspect of the transaction requires a license.

**COMMENTS:** The CBW controls are maintained in support of U.S. foreign policy goals of opposing the proliferation of chemical and biological weapons. (See Section 742.2 of the EAR). A license is required to export certain CCL-listed chemical precursors, biological agents, associated equipment, materials and technical data. (See Section 742.2 of the EAR). Shipments of controlled chemical weapons precursors may be made under License Exceptions only to Australia Group/NATO country members as identified in Supplement 1 to Part 740, A:1 & A:3 of the EAR. Biological agents require a license to all destinations including Canada. Equipment and materials that could be used in the production of controlled chemical precursors or biological and chemical warfare agents may be exported under License Exceptions to all countries except those listed in Country Group E or in Country Group D:3 in Supplement 1 to Part 740 of the EAR.

In addition, a license is required for any type of export when a U.S. firm "knows" that the transaction involves end-uses related to the design, development, production, stockpiling or use of chemical or biological weapons to or by countries listed in Supplement 1 to Part 740, D:3 (See Section 744.4(a) of the EAR). A license is also required if BXA "informs" the firm that a license is required because there is an unacceptable risk of use in or diversion to CBW activities anywhere in the world. (See Section 744.4(b) of the EAR)

Completion of the CBW screening process can be viewed as a procedure for helping to ensure that firms are involved only in authorized trade. Therefore, this screen is provided to assist the firm in establishing and maintaining a documented audit trail to show how CBW compliance is determined. The CBW checklists should be documented in writing, dated, initialed, and maintained according to your recordkeeping practices.

The CBW checklists may be completed as customers are evaluated for credit purposes or during the order process. It should be performed by the EMS Administrator, an account representative or engineer with sufficient knowledge of the customer's activities to respond to the CBW indicator questions on the CBW checklists.

Extra caution should be used in exporting items to institutes of science and technology, conventional weapons and armaments research and development establishments, and other military entities. Other precautions relating to equipment are noted below.

**Chemical:** Most chemical weapon manufacturing uses materials which are very corrosive. Chemical equipment made or lined with nickel, hastelloy, monel, and other high nickel content alloys etc., are of special proliferation concern due to the fact they are corrosion resistant and therefore may be used in the chemical weapons manufacturing process. Requests for this and other similar types of equipment should be screened carefully.

Many chemical weapons precursors have legitimate civil end-uses. The exporter should be cautious that the civil end-use explanations provided by the end customer is not simply a "front" to mask a CBW activity. Unfortunately, it is impossible to list all of the civil end-uses of chemical weapons precursors. Many are noted in the Level 2 CBW check for chemical or biological activities or industries. Other popular civil end-uses include: alkylation/polymerization, anti-corrosives, anti-foam agents, antiseptics, catalysts, chlorinating agents, dental prophylaxis, detergents, disinfectants, electroplating, ethylene flame retardants, fluorating agents, fumigants, gasoline additives, hydraulic fluids, hypotensive agents, lubricant additives, nylon production, pyrotechnics, and surfactants.

**Biological:** The following list is a sample of items likely to be sought by entities engaged in biological weapons activities:

- Equipment for bacterial containment at the pathogen P-3 and P-4 levels such as:

- High efficiency particulate air filters (HEPA filters).
- Double-ended or large capacity autoclaves.
- Air-supplied laboratory protective clothing.
- Micro-biological containment safety cabinets.

- Fermentation equipment especially where the fermentation vessels have a self-sterilizing capability

- Fermentation media - large quantities e.g. hundreds of kilograms

- Large scale agent concentration or harvesting equipment such as:

- Continuous flow centrifuges.
- Extraction columns.
- Filters suitable for concentrating biological agents.

- Equipment for preserving and stockpiling biological agents such as:

- Freeze-drying equipment.
- Microencapsulation equipment.

- Equipment for dispersing biological agents e.g. aerosol generators.

## Activities of U.S. Persons

Firms must be aware that Section 744.6 of the EAR restricts "knowing" participation and support by U.S. persons, including foreign branches of U.S. firms, in CBW-related activities in or by countries listed in Supplement 1 to Part 740, D:3. The restrictions apply to the export, reexport or transfer of **any** item, including foreign origin items, by the U.S. person. Support activities include financing, freight forwarding, transportation and other comparable assistance by which a person facilitates an export, reexport or transfer. Section 744.6 of the EAR also prohibits any U.S. person from performing any contract, service or employment knowing it will assist in CBW activities in or by countries listed in Supplement 1 to Part 740, D:3. In addition, restrictions are placed on U.S. person participation in the design, construction or export of whole chemical plants.

Therefore, a firm should create CBW proliferation awareness among its employees. Sales representatives, traffic departments and personnel involved with credit checks, order receipts, requests for quotes, invoicing and servicing of products should be fully trained to recognize a potential transaction or activity of concern. Accordingly, questionable transactions or activities should be reported to the EMS Administrator for further review and action.

Firms may also wish to consider including CBW information in the management policy statement. This is especially true for firms that export to destinations listed in Supplement 1 to Part 740, D:3. Including this information will demonstrate to employees that the firm's management requires and supports their efforts in complying with CBW controls.

**ATTACHMENT 6 - B  
CHEMICAL AND BIOLOGICAL WEAPONS APPLICABILITY  
CHECKLIST**

FIRM NAME: \_\_\_\_\_  
COUNTRY: \_\_\_\_\_  
ORDER #: \_\_\_\_\_  
DATE SCREENED: \_\_\_\_\_  
PERFORMED BY: \_\_\_\_\_

**Level 1**

Is the item controlled for CBW reasons?

YES \_\_\_\_\_ NO \_\_\_\_\_

If yes, is the transaction eligible for NLR or a License Exception?

If no, apply for a license.

If yes, proceed to Level 2.

**Level 2**

Have you been "informed by" the Bureau of Export Administration (BXA) that a license is required or is the end-user/customer on the Entity List?

YES \_\_\_\_\_ NO \_\_\_\_\_

If yes, a license application must be submitted to BXA and a license exception may not be used.

If no, proceed to Level 3.

**Level 3**

Does the transaction involve a destination of concern listed in Country Group D:3 in Supplement 1 to Part 740, D:3 of the EAR?

YES \_\_\_\_\_ NO \_\_\_\_\_

If no a License Exception or NLR may be used.

If yes, proceed to level 4.

#### Level 4

A. Is the end-user involved in any of the following chemical or biological activities or industries:

- |   |                  |
|---|------------------|
| -chemical plants  | YES ____ NO ____ |
| -petrochemical plant  | YES ____ NO ____ |
| -petroleum  | YES ____ NO ____ |
| -cosmetics  | YES ____ NO ____ |
| -food processing equipment  | YES ____ NO ____ |
| -glass, ceramic or porcelain production   | YES ____ NO ____ |
| -mining operations  | YES ____ NO ____ |
| -metal manufacturing  | YES ____ NO ____ |
| -organic synthesis  | YES ____ NO ____ |
| -paper manufacturing  | YES ____ NO ____ |
| -plastic or rubber manufacturing  | YES ____ NO ____ |
| -pharmaceuticals  | YES ____ NO ____ |
| -textile or textile dyes  | YES ____ NO ____ |
| -insecticides or pesticides   | YES ____ NO ____ |
| -semiconductor manufacturing  | YES ____ NO ____ |
| -paint production   | YES ____ NO ____ |
| -institutes of science and technology   | YES ____ NO ____ |
| -conventional weapons and armaments   |                  |
| research & development establishments   | YES ____ NO ____ |
| -other military entities  | YES ____ NO ____ |
| -other potential end-users of controlled<br>chemical weapons precursors or<br>biological agents | YES ____ NO ____ |

If the answer to any of these is yes, proceed to Level 5, the CBW Profile Checklist, Attachment 6-C.

If the answer to all of these is no, a License Exception may be used if no other aspect of the transaction requires a license.

**ATTACHMENT 6-C**  
**CBW PROFILE CHECKLIST**  
**Level 5**

COMPANY NAME: \_\_\_\_\_  
COUNTRY: \_\_\_\_\_  
ORDER #: \_\_\_\_\_  
DATE SCREENED: \_\_\_\_\_  
PERFORMED BY: \_\_\_\_\_

Has the customer:

(1) provided evasive responses or is reluctant to provide an adequate explanation concerning:

-the chemicals or biological agents to be produced with the equipment?  
end-use of the chemicals or biological agents produced with the equipment?  
YES\_\_\_ NO\_\_\_ N/A\_\_\_

(2) been reluctant to explain sufficiently the chemical raw materials or biological agents to be used with the equipment being purchased?

YES\_\_\_ NO\_\_\_ N/A\_\_\_

(3) ordered quantities excessive for the production capability of the end user?

YES\_\_\_ NO\_\_\_ N/A\_\_\_

(4) made requests for excessive safety/security devices/measures in light of the stated end-use, or the customer's lack of familiarity with appropriate safety/security measures?

YES\_\_\_ NO\_\_\_ N/A\_\_\_

(5) made requests to complete a partly finished project and/or will not provide license authorizations obtained for the part of the project already completed?

YES\_\_\_ NO\_\_\_ N/A\_\_\_

(6) requested modification of a plant or equipment item in an existing or planned facility that changes production capability significantly and could make the facility more suitable for the manufacture of chemical weapons, chemical weapon precursors or biological agents and weapons?

YES\_\_\_ NO\_\_\_ N/A\_\_\_



ATTACHMENT 6-C (CON)

(7) requested models of equipment or containers made or lined with nickel, hastelloy, monel other high nickel content or which are airtight beyond the normal requirements for the stated end-use, especially when less expensive models are appropriate for the end use?

YES\_\_\_ NO\_\_\_ N/A\_\_\_

(8) requested excessive confidentiality concerning final destination or details on equipment, materials or technical data to be delivered?

YES\_\_\_ NO\_\_\_ N/A\_\_\_

(9) requested that the items be installed in:

an area under unusual strict security control (such areas may include but are not limited to: area close to a military-related facility, to which access is severely restricted; science and technology parks, or the facility is isolated from major population centers)?

YES\_\_\_ NO\_\_\_ N/A\_\_\_

an atypical location in light of the character of the equipment (e.g. milk pasteurization equipment that is not being installed near a dairy or baby food distribution/packaging center)?

YES\_\_\_ NO\_\_\_ N/A\_\_\_

(10) refused personnel contractor or subcontractor access to parts of the plant other than those involved in the contract?

YES\_\_\_ NO\_\_\_ N/A\_\_\_

(11) divided contract for the construction or renovation of a plant without furnishing adequate information about the complete scope of the project, including the final destination and proposed use of the plant?

YES\_\_\_ NO\_\_\_ N/A\_\_\_

If the answer to any of these questions is yes and cannot be adequately resolved, you should consider filing a license application with BXA.