SUMMARY: The Bureau of Export Administration (BXA) is amending the Export Administration Regulations (EAR) to implement the understandings reached at the October 2000 plenary meeting of the Australia Group (AG). This final rule amends the Commerce Control List (CCL) and the corresponding export licensing provisions in the EAR to authorize exports, without a license, to State Parties to the Chemical Weapons Convention (CWC) of medical, analytical, diagnostic, and food testing kits containing small quantities of AG-controlled chemicals that are also identified on CWC Schedule 2 or 3, provided that they meet certain criteria. An export license for these kits is still required for anti-terrorism (AT) reasons or for other reasons specified in the EAR (e.g., embargoes). This rule also amends the CCL to implement a new AG policy on mixtures containing certain AG-controlled chemicals. Mixtures containing less than 30 percent by weight (previously 25 percent or less) of any single AG-controlled chemical generally may be exported without a license, unless the controlled chemical is also: (1) a CWC Schedule 1 chemical or (2) a CWC Schedule 2 chemical destined for a State not Party to the CWC. However, exports of these mixtures to certain destinations continue to require a license for AT reasons or for other reasons specified in the EAR (e.g., embargoes).

In addition, this final rule amends the CCL to clarify controls on certain graphite-lined chemical manufacturing equipment, to revise controls on centrifugal separators, and to establish a new minimum size threshold for the control of heat exchangers and condensers. Furthermore, this rule amends the EAR by adding Cyprus and Turkey to Country Group A:3, which identifies the countries that participate in the Australia Group, thereby eliminating license requirements for exports and reexports of certain AG-controlled items to these two countries.

This rule also amends the CWC-related provisions in the EAR to clarify the export license requirements and policies for certain toxic chemicals and precursors listed in the Schedules of Chemicals contained within the Annex on Chemicals to the CWC. Specifically, this rule revises certain CWC-related provisions in the EAR to clarify BXA’s export license requirements and policies in light of the CWC prohibition on retransfers of Schedule 1 chemicals to third countries and the CWC prohibition on exports of Schedule 2 chemicals to States not Party to the CWC that took effect on April 29, 2000. Finally, this rule updates the list of countries that are currently States Parties to the CWC by adding the following countries: Azerbaijan, Colombia, Dominica, Eritrea, Gabon, Jamaica, Kazakhstan, Kiribati, Liechtenstein, Malaysia, Mozambique, Nicaragua, San Marino, the United Arab Emirates, Yemen, the Federal Republic of Yugoslavia (Serbia and Montenegro), and Zambia.

DATES: This rule is effective (DATE OF PUBLICATION).

SUPPLEMENTARY INFORMATION:

A. Revisions to the EAR based on the October 2000 Plenary meeting of the Australia Group.

Background

The Bureau of Export Administration (BXA) is amending the Export Administration Regulations (EAR) to implement understandings reached at the annual plenary meeting of the Australia Group (AG) chemical and biological weapons nonproliferation control regime that was held in Paris on October 2-5, 2000. The Australia Group is a multilateral forum, consisting of 32 participating countries, that maintains export controls on a list of chemicals, biological agents, and related equipment and technology that could be used in a chemical or biological weapons program. The AG periodically reviews items on its control list to enhance the effectiveness of participating governments’ national controls and to achieve greater harmonization among these controls.

At the October 2000 AG plenary meeting, participants reached an understanding that it was permissible to allow exports, without a license, to State Parties to the Chemical Weapons Convention (CWC) (destinations listed in Supplement No. 2 to Part 745 of the EAR) of medical, analytical, diagnostic, and food testing kits containing small quantities of AG-controlled chemicals that also are identified as Schedule 2 or 3 chemicals under the CWC, provided that the kits: (1) are pre-packaged materials of defined composition, (2) are specifically developed, packaged, and marketed for diagnostic, analytical, or public health purposes, and (3) contain no more than 300 grams of any single AG-controlled chemical.

This final rule implements the AG understanding on kits by amending the License Requirements section of Export Control Classification Number (ECCN) 1C350 on the Commerce Control List (CCL) to add a new Note 4 that excludes such test kits from the scope of this ECCN. These kits are now controlled under ECCN 1C995, where they continue to require a license to States not Party to the CWC for "CW" reasons and to certain
destinations for "AT" reasons. This rule also revises Section 742.18 of the EAR to include a description of the license requirements and licensing policies that apply to exports of test kits controlled by ECCN 1C995 to States not Party to the CWC.

Participants at the October 2000 AG plenary meeting also reached an understanding on a rule governing exports of mixtures that contain AG-controlled chemicals (identified in ECCN 1C350). Mixtures containing less than 30 percent by weight (previously 25 percent or less) of any single AG-controlled chemical generally may be exported without a license unless the controlled chemical is also: (1) a CWC Schedule 1 chemical or (2) a CWC Schedule 2 chemical destined for a State not Party to the CWC. Mixtures excluded from the scope of ECCN 1C350, as described in the License Requirements Note that applies to mixtures containing chemicals controlled by that ECCN, continue to be controlled to certain destinations under ECCN 1C995 for AT reasons. This final rule revises Note 2 in the License Requirements section of ECCN 1C350 to reflect the new AG understanding on mixtures.

A license continues to be required for exports, to States not Party to the CWC, of mixtures that contain more than 10 percent of any single AG-controlled CWC Schedule 2 chemical. A license is also still required to export mixtures containing AG-controlled CWC Schedule 1 chemicals, regardless of the concentration, unless the mixture contains less than 0.5 percent aggregate quantities of Schedule 1 chemicals as unavoidable by-products or impurities (i.e., the Schedule 1 chemicals have not been intentionally produced or added).

Specifically, this rule revises ECCN 2B350.d to establish a minimum size control threshold for the heat transfer surface area of heat exchangers and condensers. This ECCN now controls heat exchangers or condensers with a heat transfer surface area of less than 20 m², but greater than 0.15 m².

The October 2000 AG plenary meeting also resulted in understandings to establish a new minimum size threshold for the control of heat exchangers and condensers, to clarify controls on certain graphite-lined equipment, and to revise controls on centrifugal separators. This final rule implements these changes by revising the List of Items Controlled in ECCNs 2B350 and 2B352.

A license continues to be required for exports, to States not Party to the CWC, of mixtures that contain more than 10 percent of any single AG-controlled CWC Schedule 2 chemical. A license is also still required to export mixtures containing AG-controlled CWC Schedule 1 chemicals, regardless of the concentration, unless the mixture contains less than 0.5 percent aggregate quantities of Schedule 1 chemicals as unavoidable by-products or impurities (i.e., the Schedule 1 chemicals have not been intentionally produced or added).

The October 2000 AG plenary meeting also resulted in understandings to establish a new minimum size threshold for the heat transfer surface area of heat exchangers and condensers. This ECCN now controls heat exchangers or condensers with a heat transfer surface area of less than 20 m², but greater than 0.15 m², where all surfaces that come in direct contact with the chemical(s) being processed are made from certain listed materials. This rule also revises ECCN 2B350 to clarify that certain heat exchangers or condensers (2B350.d.4), distillation or absorption columns (2B350.e.4), multi-walled piping (2B350.h.4), and pumps (2B350.i.6) are controlled under this entry if all surfaces that come in direct contact with the chemical being processed are made of carbon-graphite. A technical note is added to ECCN 2B350 to define "carbon-graphite" as a composition consisting primarily of graphite and amorphous carbon, in which the graphite is 8 percent or more by weight of the composition.

This final rule revises the controls on centrifugal separators controlled under ECCN 2B352 by changing the control criterion that applies to sealing joints located within the steam containment area from "double or multiple sealing joints" to "one or more sealing joints".

Finally, this rule amends the EAR to add Cyprus and Turkey as the two newest participating countries in the Australia Group (which now includes a total of 32 countries). Supplement No. 1 to Part 740 (Country Groups) is revised to add Cyprus and Turkey to Country Group A:3 (Australia Group) and Supplement No. 1 to Part 738 (Commerce Country Chart) is revised to remove the licensing requirements for both countries under CB Column 2 in conformance with the licensing policy that applies to other AG participating countries. This rule also amends Section 770.2 paragraph (k), Interpretation 11: Precursor chemicals," by removing an unnecessary listing of the countries participating in the Australia Group.

B. Revisions and clarifications to the CWC-related provisions in the EAR.

The Bureau of Export Administration (BXA) also is amending provisions in the Export Administration Regulations (EAR) related to the Chemical Weapons Convention (CWC) to clarify BXA’s export license requirements and policies for these chemicals and precursors in light of the CWC prohibition on retransfers of Schedule 1 chemicals to third countries and the CWC prohibition on exports of Schedule 2 chemicals and precursors to States not Party to the CWC that took effect on April 29, 2000.

Specifically, this rule revises Section 742.18(b)(1)(i) in the EAR, which identifies certain factors that BXA will consider when reviewing license applications to export Schedule 1 chemicals to States Parties to the CWC (see Supplement No. 2 to Part 745 of the EAR). Previously, paragraph (b)(1)(i) listed three conditions that had to be met before BXA would approve an application to export Schedule 1 chemicals to States Parties to the CWC. Now, the licensing policy in paragraph (b)(1)(i) states that BXA generally will deny license applications to export Schedule 1 chemicals to States Parties to the CWC, unless all of the conditions are met. A new licensing condition, which restates the CWC prohibition against retransfers of Schedule 1 chemicals to third countries, is added to the three conditions originally listed in paragraph (b)(1)(i). BXA generally will deny applications to export CWC Schedule 1 chemicals that were imported into the United States on or after April 29, 1997, unless the Schedule 1 chemicals are to be exported back to the same State Party from which they were previously imported.

This rule also amends Section 742.18 of the EAR by removing the license requirements and policies that applied to exports of CWC Schedule 2 chemicals and precursors to States not Party to the CWC prior to the April 29, 2000, effective date of the CWC prohibition on such exports. Since April 29, 2000, all exports of CWC Schedule 2 chemicals to States not Party to the CWC have required a license and have been subject to a general policy of denial.

In addition, this rule revises Section 742.18 to clarify the licensing requirements and policies that apply to exports of Schedule 3 chemicals and precursors controlled for CW reasons by Export Control Classification Number (ECCN) 1C350 or 1C355 to States not Party to the CWC. This rule states that an End-Use Certificate is required to export any quantity of a CWC Schedule 3 chemical to States not Party to the CWC, regardless of whether or not a license is required for reasons other than CW reasons (please note that BXA does not require submission of an End-Use Certificate for reexports; however, reexports of Schedule 3 chemicals may be subject to an End-Use Certificate requirement by governments of other countries). The CWC-related licensing requirements in Section 742.18 are also revised to inform exporters that exports of chemicals controlled for CW reasons may require a license for other reasons set forth elsewhere in the EAR. Section 742.18 now cross-references the Australia Group licensing requirements and policies in Section 742.2 of the EAR, the end-use and end-user restrictions in Part 744 of the EAR, and the restrictions in Part 746 of the EAR that apply to embargoed destinations.

This rule revises Supplement No. 2 to Part 745 (titled "States Parties to the Convention on the Prohibition of the Development, Production,
This rule amends Supplement No. 1 to Part 774 (the Commerce Control List) (CCL) by revising the "License Requirements" sections of ECCNs 1C350 and 1C355 to clarify the licensing requirements and policies for chemicals controlled by these ECCNs for CW reasons. The revisions to these ECCNs conform with the clarifications that this rule makes in the CWC licensing requirements and policies described in Section 742.18 of the EAR. The rule clarifies and restructures, but does not change, BXA’s policy concerning sample shipments of chemicals and precursors controlled by ECCN 1C350. For example, this rule adds CWC Schedule 2 chemicals to the category of "chemicals not eligible" for sample shipments, as described in the License Requirements Notes for ECCN 1C350. Language is added to the eligibility requirements for sample shipments in ECCN 1C350 to emphasize that the End-Use Certificate requirement described in Section 745.2 of the EAR applies to exports of "any quantity" of Schedule 3 chemicals to CWC non-States Parties.

This rule also revises Note 1(b) in the License Requirements section of ECCN 1C355 to implement a decision of the Organization for the Prevention of Chemical Weapons (OPCW) of the CWC concerning mixtures that contain one or more CWC Schedule 3 chemicals. The OPCW eliminated end-use certificate requirements for products containing "30 percent or less" by weight of any single Schedule 3 chemical. However, the AG rule for mixtures that contain Schedule 3 chemicals controlled by ECCN 1C350 only exempts mixtures that contain "less than 30 percent" by weight of any single Schedule 3 chemical. Therefore, this rule implements a mixtures rule of "less than 30 percent" in ECCN 1C355 to be consistent with the AG mixtures rule in ECCN 1C350.

In addition, this rule revises the requirements for mixtures containing one or more CWC Schedule 2 chemicals controlled by ECCN 1C355 to reflex the more stringent CWC controls that apply to the toxic chemical PFIB. Mixtures containing one or more CWC Schedule 2 chemicals controlled by ECCN 1C355 do not require a license for CW reasons if they contain 10 percent or less of any single CWC Schedule 2 chemical, except for mixtures containing PFIB, which require a license when PFIB constitutes more than 1 percent of the weight of the mixture.

Finally, this rule amends Section 736.2(b)(7)(i), which contains Prohibition Seven, "Support of Proliferation Activities (U.S. Person Proliferation Activity)," by removing the reference to the End-Use Certificate requirement that previously applied to exports of CWC Schedule 2 chemicals to States not Party to the CWC. This change is based on the CWC prohibition on exports of Schedule 2 chemicals and precursors to States not Party to the CWC that took effect on April 29, 2000. In addition, this rule amends Section 736.2(b)(7)(i) to correctly reference the advance notification and annual report requirements contained in Section 745.1 that apply to Schedule 1 chemicals and precursors listed in Supplement No. 1 to Part 745 of the EAR.

Rulemaking Requirements

1. This rule has been determined not to be significant for purposes of Executive Order 12866.

2. Notwithstanding any other provision of law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number. This rule contains collections of information subject to the requirements of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). These collections have been approved by the Office of Management and Budget under Control Numbers 0694-0088 and 0694-0117.

3. This rule does not contain policies with Federalism implications as that term is defined in Executive Order 13132.

4. The provisions of the Administrative Procedure Act (5 U.S.C. 553) requiring notice of proposed rulemaking, the opportunity for public participation, and a delay in effective date, are inapplicable because this regulation involves a military and foreign affairs function of the United States (Sec. 5 U.S.C. 553(a)(1)). Further, no other law requires that a notice of proposed rulemaking and an opportunity for public comment be given for this final rule. Because a notice of proposed rulemaking and an opportunity for public comment are not required to be given for this rule under 5 U.S.C. 553 or by any other law, the analytical requirements of the Regulatory Flexibility Act (5 U.S.C. 601 et seq.) are not applicable.

Therefore, this regulation is issued in final form. Although there is no formal comment period, public comments on this regulation are welcome on a continuing basis. Comments should be submitted to Willard Fisher, Regulatory Policy Division, Bureau of Export Administration, U.S. Department of Commerce, Room 2705, 14th Street and Pennsylvania Avenue, N.W., Washington, DC 20230.

List of Subjects

15 CFR Part 738
Administrative practice and procedure, Exports, Foreign trade.

15 CFR Part 740
Administrative practice and procedure, Exports, Foreign trade, Reporting and recordkeeping requirements.

15 CFR Parts 736, 742, and 770
Exports, Foreign trade.

15 CFR Part 745
Administrative practice and procedure, Chemicals, Exports, Foreign trade, Reporting and recordkeeping requirements.
Accordingly, Parts 736, 738, 740, 742, 745, 770, and 774 of the Export Administration Regulations (15 CFR Parts 730-799) are amended as follows:

1. The authority citation for 15 CFR Part 736 is revised to read as follows:


2. The authority citation for 15 CFR Part 738 is revised to read as follows:


3. The authority citation for 15 CFR Part 740 is revised to read as follows:


4. The authority citation for 15 CFR Part 742 is revised to read as follows:


5. The authority citation for 15 CFR Part 745 is revised to read as follows:


6. The authority citation for 15 CFR Part 770 is revised to read as follows:


7. The authority citation for 15 CFR Part 774 is revised to read as follows:


PART 736 - [AMENDED]

8. Section 736.2 is amended by revising paragraphs (b)(7)(i)(B) and (b)(7)(i)(C) to read as follows:

§736.2 General Prohibitions and Determination of Applicability.

* * * * *

(b) * * *

(7) * * *

(i) * * *

(B) If you are a U.S. person as that term is defined in §744.6(c) of the EAR, you may not export a Schedule 1 chemical listed in Supplement No. 1 to Part 745 without first complying with the provisions of §§742.18 and 745.1 of the EAR.

(C) If you are a U.S. person as that term is defined in §744.6(c) of the EAR, you may not export a Schedule 3 chemical listed in Supplement No. 1 to Part 745 to a destination not listed in Supplement No. 2 to Part 745 without complying with the End-Use Certificate requirements in §745.2 of the EAR that apply to Schedule 3 chemicals controlled for CW reasons in ECCN 1C350 or ECCN 1C355.

* * * * *

PART 738 - [AMENDED]
9. Supplement No. 1 to Part 738 is amended by revising the entries for "Cyprus" and "Turkey" to read as follows:

**Supplement No. 1 to Part 738--COMMERCE COUNTRY CHART**

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<tr>
<th>Countries</th>
<th>Chemical &amp; Biological Weapons</th>
<th>Nuclear Nonproliferation</th>
<th>National Security</th>
<th>Missile Tech</th>
<th>Regional Stability</th>
<th>Firearms Convention</th>
<th>Crime Control</th>
<th>Anti-Terrorism</th>
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**Supplement No. 1 to Part 740--COUNTRY GROUPS**

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<tr>
<td>Missile Technology</td>
</tr>
<tr>
<td>Control Regime</td>
</tr>
</tbody>
</table>

**PART 740 - [AMENDED]**

10. In Supplement No. 1 to Part 740, Country Groups, Country Group A is amended by adding, in alphabetical order, a new entry for "Cyprus" and by revising the entry for "Turkey" to read as follows:

**Supplement No. 1 to Part 740--COUNTRY GROUPS**

<table>
<thead>
<tr>
<th>Country</th>
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**PART 742 - [AMENDED]**

11. Section 742.2 is amended by adding a new paragraph (a)(2)(i)(C) to read as follows:

§742.2 Proliferation of Chemical and Biological Weapons

(a) * * *

(2) * * *

(i) * * *
C) This licensing requirement does not apply to exports to CWC States Parties (destinations listed in Supplement No. 2 to Part 745 of the EAR) of medical, analytical, diagnostic, and food testing kits containing small quantities of chemicals identified in ECCN 1C350 that are also identified as Schedule 2 or 3 chemicals under the CWC, provided that the kits are pre-packaged materials of defined composition that are specifically developed, packaged, and marketed for diagnostic, analytical, or public health purposes and contain no more than 300 grams of any controlled chemical. These kits are controlled by ECCN 1C995 for CW and AT reasons.

* * * *

12. Section 742.18 is revised to read as follows:

§742.18 Chemical Weapons Convention (CWC or Convention).

States that are parties to the Convention on the Prohibition of the Development, Production, Stockpiling, and Use of Chemical Weapons and on Their Destruction, also known as the Chemical Weapons Convention (CWC or Convention), undertake never to develop, produce, acquire, stockpile, transfer, or use chemical weapons. As a State Party to the Convention, the United States is subjecting certain toxic chemicals and their precursors listed in Schedules within the Convention to trade restrictions. Trade restrictions include: a prohibition on the export of Schedule 1 chemicals to States not Party to the CWC; a prohibition on the reexport of Schedule 1 chemicals to all destinations (both States Parties to the CWC and States not Party to the CWC); license requirements for the export of Schedule 1 chemicals to all States Parties; a prohibition on the export of Schedule 2 chemicals to States not Party to the CWC; and an End-Use Certificate requirement for exports of Schedule 3 chemicals to States not Party to the CWC. Exports of CWC chemicals that do not require a license for CW reasons (e.g., exports and reexports of Schedule 2 and Schedule 3 chemicals to States Parties to the CWC) may require a license for other reasons set forth in the EAR. (See, in particular, the license requirements in §742.2 of the EAR that apply to exports and reexports of chemicals and precursors controlled by ECCN 1C350, for CB reasons. Also note the end-use and end-user restrictions in part 744 of the EAR and the restrictions that apply to embargoed countries in part 746 of the EAR.)

(a) License requirements

(1) Schedule 1 chemicals under ECCN 1C350 or ECCN 1C351. A license is required for CW reasons to export or reexport Schedule 1 chemicals controlled under ECCN 1C350.a.20, a.24, or a.31 or ECCN 1C351.d.5 or d.6 to all destinations including Canada. CW applies to 1C351.d.5 for ricin in the form of Ricinus Communis AgglutininI (RCAI), which is also known as ricin D or Ricinus Communis LectinI (RCLI), and Ricinus Communis LectinIV (RCLIV), which is also known as ricin E. CW applies to 1C351.d.6 for saxitoxin identified by C.A.S. #35523-89-8. (Note that the advance notification procedures and annual reporting requirements described in §745.1 of the EAR also apply to exports of Schedule 1 chemicals.)

(2) Schedule 2 and 3 chemicals under ECCN 1C350, ECCN 1C355, or ECCN 1C995.

(i) States Parties to the CWC. Neither a license nor an End-Use Certificate is required for CW reasons to export or reexport Schedule 2 and 3 chemicals controlled under ECCN 1C350, ECCN 1C355, or 1C995.b to States Parties to the CWC (destinations listed in Supplement No. 2 to part 745 of the EAR).

(ii) States not Party to the CWC.

(A) Schedule 2 chemicals. A license is required for CW reasons to export or reexport Schedule 2 chemicals controlled under ECCN 1C350, ECCN 1C355, or ECCN 1C995.b to States not Party to the CWC (destinations not listed in Supplement No. 2 to part 745 of the EAR).

(B) Schedule 3 chemicals.

(1) Exports. A license is required for CW reasons to export Schedule 3 chemicals controlled under ECCN 1C350, ECCN 1C355, or ECCN 1C995.b to States not Party to the CWC (destinations not listed in Supplement No. 2 to Part 745 of the EAR), unless the exporter obtains from the consignee an End-Use Certificate (issued by the government of the importing country) prior to exporting the Schedule 3 chemicals and submits it to BXA in accordance with the procedures described in §745.2 of the EAR. Note, however, that obtaining an End-Use Certificate does not relieve the exporter from the responsibility of complying with other license requirements set forth elsewhere in the EAR.

(2) Reexports. Neither a license nor an End-Use Certificate is required for CW reasons to reexport Schedule 3 chemicals controlled under ECCN 1C350, ECCN 1C355, or ECCN 1C995.b from States Parties to the CWC (destinations listed in Supplement No. 2 to part 745 of the EAR). However, a license may be required for other reasons set forth elsewhere in the EAR. In addition, please note that reexports of Schedule 3 chemicals may be subject to an End-Use Certificate requirement by governments of other countries when the chemicals are destined for States not Party to the CWC.

(C) Technology controlled under ECCN 1E355. A license is required for CW reasons to export or reexport technology controlled under ECCN 1E355 to all States not Party to the CWC (destinations not listed in Supplement No. 2 to part 745 of the EAR), except for Israel and Taiwan.

(b) Licensing policy.

(1) Schedule 1 chemicals.
(i) **Exports to States Parties to the CWC.** Applications to export Schedule 1 chemicals controlled under ECCN 1C350 or ECCN 1C351 to States Parties to the CWC (destinations listed in Supplement No. 2 to part 745 of the EAR) generally will be denied, unless all of the following conditions are met:

(A) The chemicals are destined only for purposes not prohibited under the CWC (i.e., research, medical, pharmaceutical, or protective purposes);

(B) The types and quantities of chemicals are strictly limited to those that can be justified for those purposes;

(C) The Schedule 1 chemicals were not previously imported into the United States (this does not apply to Schedule 1 chemicals imported into the United States prior to April 29, 1997, or imported into the United States directly from the same State Party to which they now are to be returned, i.e., exported); and

(D) The aggregate amount of Schedule 1 chemicals in the country of destination at any given time is equal to or less than one metric ton and receipt of the proposed export will not cause the country of destination to acquire or to have acquired one metric ton or more of Schedule 1 chemicals in any calendar year.

(ii) **Exports to States not Party to the CWC.** Applications to export Schedule 1 chemicals controlled under ECCN 1C350 or ECCN 1C351 to States not Party to the CWC (destinations not listed in Supplement No. 2 to part 745 of the EAR) generally will be denied, consistent with U.S. obligations under the CWC to prohibit exports of these chemicals to States not Party to the CWC.

(iii) **Reexports.** Applications to reexport Schedule 1 chemicals controlled under ECCN 1C350 or ECCN 1C351 generally will be denied to all destinations (including both States Parties to the CWC and States not Party to the CWC).

(2) **Schedule 2 chemicals.** Applications to export or reexport Schedule 2 chemicals controlled under ECCN 1C350, ECCN 1C355, or ECCN 1C995.b to States not Party to the CWC (destinations not listed in Supplement No. 2 to part 745) generally will be denied, consistent with U.S. obligations under the CWC to prohibit exports of these chemicals to States not Party to the CWC.

(3) **Schedule 3 chemicals.** Applications to export Schedule 3 chemicals controlled under ECCN 1C350, ECCN 1C355, or ECCN 1C995.b to States not Party to the CWC (destinations not listed in Supplement No. 2 to part 745) generally will be denied.

(4) **Technology controlled under ECCN 1E355.** Exports and reexports of technology controlled under ECCN 1E355 will be reviewed on a case-by-case basis.

(c) **Contract sanctity.** Contract sanctity provisions are not available for license applications reviewed under this section.

**PART 745 - [AMENDED]**

13. Section 745.2 is amended by revising the phrase "Schedule 2 or Schedule 3" to read "Schedule 3" wherever it appears in the Note immediately following the section heading and in the first sentence of paragraph (a)(1).

14. Supplement No. 2 to Part 745 is amended by revising the undesignated subheading entitled "List of States Parties as of September 13, 1999" to read "List of States Parties as of August 1, 2001" and by adding, in alphabetical order, the following countries: Azerbaijan, Colombia, Dominica, Eritrea, Gabon, Jamaica, Kazakhstan, Kiribati, Liechtenstein, Malaysia, Mozambique, Nicaragua, San Marino, the United Arab Emirates, Yemen, Yugoslavia (Federal Republic of), and Zambia.

**PART 770 - [AMENDED]**

15. Section 770.2 is amended by revising the introductory text of paragraph (k) to read as follows:

§770.2 Item Interpretations

* * * *

(k) **Interpretation 11: Precursor chemicals.** The following chemicals are controlled by ECCN 1C350. The appropriate Chemical Abstract Service Registry (C.A.S.) number and synonyms (i.e., alternative names) are included to help you determine whether or not your chemicals are controlled by this entry.

* * * *

**PART 774 - [AMENDED]**

16. In Supplement No. 1 to Part 774 (the Commerce Control List), Category 1 -- Materials, Chemicals, "Microorganisms," and "Toxins," is amended by revising the heading and the License Requirements section for ECCN 1C350, as follows:

1C350 Chemicals that may be used as precursors for toxic chemical agents.

License Requirements

Reason for Control: CB, CW, AT
CB applies to entire entry. CB Column 2

CW applies to 1C350.a.2, a.3, a.5, a.6, a.7, a.8, a.10, a.11, a.12, a.13, a.15, a.16, a.17, a.20, a.21, a.22, a.23, a.24, a.28, a.29, a.30, a.31, a.32, a.33, a.35, a.37, a.41, a.47, a.48, a.49, a.50, a.51, a.53, or a.54. The Commerce Country Chart is not designed to determine licensing requirements for items controlled for CW reasons. For Schedule 1 chemicals (1C350.a.20, a.24 and a.31), a license is required for exports to all destinations, including Canada. For Schedule 2 chemicals (1C350.a.2, a.3, a.5, a.6, a.7, a.10, a.11, a.12, a.13, a.15, a.16, a.21, a.22, a.23, a.24, a.28, a.29, a.30, a.31, a.32, a.33, a.35, a.37, a.41, a.47, a.48, a.49, a.50, a.51, a.53, or a.54, the license is required for exports to countries not listed in Supplement No. 2 to part 745 of the EAR. For Schedule 3 chemicals (1C350.a.8, a.17, a.32, a.33, a.35, a.47, a.48, a.50, a.51, a.53, and a.54), a license is required for exports to countries not listed in Supplement No. 2 to part 745 of the EAR, unless an End-Use Certificate issued by the government of the importing country has been obtained by the exporter prior to export. (See §742.18 of the EAR for license requirements and policies for chemicals and precursors controlled for CW reasons. See §745.2 of the EAR for End-Use Certificate requirements that apply to exports of Schedule 3 chemicals to countries not listed in Supplement No. 2 to part 745 of the EAR.)

AT applies to entire entry AT Column 1

License Requirement Notes:

1. SAMPLE SHIPMENTS: Subject to the following requirements and restrictions, a license is not required for sample shipments when the cumulative total of these shipments does not exceed a 55-gallon container or 200 kg of each chemical to any one consignee during a calendar year. A consignee that receives a sample shipment under this exclusion may not resell, transfer, or reexport the sample shipment, but may use the sample shipment for any other legal purpose unrelated to chemical weapons.

a. Chemicals Not Eligible:

A. CW Schedule 1 chemicals (all destinations). The following CW Schedule 1 chemicals are not eligible for sample shipments to any destination without a license: 0-Ethyl-2-diisopropylaminoethyl methylphosphonite (QL) (C.A.S. #57856-11-8), Ethylphosphonyl difluoride (C.A.S. #753-98-0), and Methylphosphonyl difluoride (C.A.S. #676-99-3).

B. CW Schedule 2 chemicals (States not Party to the CWC). No CW Schedule 2 chemical controlled by this ECCN is eligible for sample shipment to States not Party to the CWC (destinations not listed in Supplement No. 2 to Part 745 of the EAR) without a license.

b. Countries Not Eligible: The following countries are not eligible to receive sample shipments of any chemicals controlled by this ECCN without a license: Cuba, Iran, Iraq, Libya, North Korea, Sudan, Syria.

c. Sample shipments that require an End-Use Certificate for CW reasons: No CW Schedule 3 chemical controlled by this ECCN is eligible for sample shipment to States not Party to the CWC (destinations not listed in Supplement No. 2 to Part 745 of the EAR) without a license, unless an End-Use Certificate issued by the government of the importing country is obtained by the exporter prior to export (see §745.2 of the EAR for End-Use Certificate requirements).

d. Sample shipments that require a license for reasons set forth elsewhere in the EAR: Sample shipments, as described in this Note 1, may require a license for reasons set forth elsewhere in the EAR. See, in particular, the end-use/end-user restrictions in Part 744 of the EAR, and the restrictions that apply to embargoed countries in Part 746 of the EAR.

e. Quarterly report requirement. The exporter is required to submit a quarterly written report for shipments of samples made under this Note 1. The report must be on company letterhead stationery (titled "Report of Sample Shipments of Chemical Precursors” at the top of the first page) and identify the chemical(s), Chemical Abstract Service Registry (C.A.S.) number(s), quantity(ies), the ultimate consignee’s name and address, and the date exported. The report must be sent to the U.S. Department of Commerce, Bureau of Export Administration, P.O. Box 273, Washington, DC 20044, Attn: "Report of Sample Shipments of Chemical Precursors”.

2. MIXTURES: Mixtures that contain precursor and intermediate chemicals identified in ECCN 1C350, in concentrations specified in paragraphs (a) through (c) of this Note 2, are controlled by this ECCN and are subject to the following licensing requirements (mixtures that contain less than the concentrations of precursor and intermediate chemicals specified in this Note 2 are controlled by ECCN 1C995):

a. A license is required for shipments to all destinations, including Canada, for mixtures containing any amount of the following Schedule 1 chemicals, unless the mixture contains less than 0.5% aggregate quantities (by weight) of these chemicals as unavoidable by-products or impurities (i.e., the Schedule 1 chemicals are not intentionally produced or added): 0-Ethyl-2-diisopropylaminoethyl methylphosphonite (QL) (C.A.S. #57856-11-8), Ethylphosphonyl difluoride (C.A.S. #753-98-0), and Methylphosphonyl difluoride (C.A.S. #676-99-3).

b. A license is required when at least one of the following chemicals constitutes 30 percent or more of the weight of the mixture, for shipments to States Parties to the CWC (destinations listed in Supplement No. 2 to Part 745 of the EAR) that are not in Country Group A:3 (see Supplement No. 1 that apply to embargoed countries in Part 746 of the EAR).


c. A license is required for shipments to destinations that are not in Country Group A:3 (Supplement No. 1 to part 740 of the EAR) when at least one of all other chemicals in the List of Items Controlled under ECCN 1C350 constitutes 30 percent or more of the weight of the mixture (related ECCN: 1C995); and

d. A license is not required under this entry for mixtures when the controlled chemical is a normal ingredient in consumer goods packaged for retail sale for personal use. Such consumer goods are classified as EAR99.

Note to Mixtures: Calculation of concentrations of AG-controlled chemicals:
a. Exclusion. No chemical may be added to the mixture (solution) for the sole purpose of circumventing the Export Administration Regulations;
b. Percent Weight Calculation. When calculating the percentage, by weight, of components in a chemical mixture, include all components of the mixture, including those that act as solvents;
c. Example.

31% chemical listed in paragraph c. of Note 2. (destined to a State not Party to the CWC)
39% chemical not listed in Note 2
30% Solvent

100% Mixture

31/100 = 31% chemical listed in paragraph c. of Note 2.

In this example, a license and an End-Use Certificate are required because a chemical listed in paragraph c. of Note 2 constitutes 30 percent or more of the weight of the mixture and the destination is a State not Party to the CWC.

3. COMPOUNDS: Compounds created with any chemicals identified in this ECCN 1C350 may be shipped NLR (No License Required), without obtaining an End-Use Certificate, unless those compounds are also identified in this entry or require a license for reasons set forth elsewhere in the EAR.

4. TESTING KITS: Certain medical, analytical, diagnostic, and food testing kits containing small quantities of chemicals identified in this ECCN 1C350 as CWC Schedule 2 or 3 chemicals are excluded from the scope of this ECCN and are controlled under ECCN 1C995. (Note that replacement reagents for such kits are controlled by ECCN 1C350 if the reagents contain one or more of the precursor or intermediate chemicals identified in this ECCN in concentrations equal to or greater than those specified for mixtures in License Requirements Note 2 for this ECCN.)

Technical Notes: 1. For purposes of this entry, a "mixture" is defined as a solid, liquid or gaseous product made up of two or more components that do not react together under normal storage conditions.

2. The scope of this control applicable to Hydrogen Fluoride (Item 25 in List of Items Controlled) includes its liquid, gaseous, and aqueous phases, and hydrates.

License Exceptions

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17. In Supplement No. 1 to Part 774 (the Commerce Control List), Category 1 -- Materials, Chemicals, "Microorganisms," and "Toxins," is amended by revising the heading and the License Requirements section for ECCN 1C355, as follows:

1C355 Chemical Weapons Convention (CWC) Schedule 2 and 3 chemicals and families of chemicals not controlled by ECCN 1C350 or by the Department of State under the ITAR.

License Requirements

Reason for Control: CW

Control(s)

CW applies to entire entry. The Commerce Country Chart is not designed to determine licensing requirements for items controlled for CW reasons. A license is required to export CWC Schedule 2 chemicals (1C355.a) to States not Party to the CWC (destinations not listed in Supplement No. 2 to part 745). A license is required to export CWC Schedule 3 chemicals (1C355.b) to States not Party to the CWC, unless an End-Use Certificate issued by the government of the importing country is obtained by the exporter, prior to export. (See §742.18 of the EAR for license requirements and policies for chemicals and precursors controlled for CW reasons.)
License Requirements Notes:

1. MIXTURES: Mixtures that contain precursor and intermediate chemicals controlled by this entry, in the concentrations specified in paragraphs (a) through (c) of this Note 1, are subject to the following requirements.

a. Mixtures are controlled under this entry when at least one of the chemicals controlled under 1C355.a constitutes more than 10 percent of the weight of the mixture, except for mixtures containing PFIB, which are controlled under this entry when PFIB constitutes more than 1 percent of the weight of the mixture.

b. Mixtures are controlled under this entry when at least one of the chemicals controlled under 1C355.b constitutes 30 percent or more of the weight of the mixture.

c. Mixtures containing chemicals identified in this entry are not controlled by ECCN 1C355 when the controlled chemical is a normal ingredient in consumer goods packaged for retail sale for personal use or packaged for individual use. Such consumer goods are classified as EAR99.

Note to Mixtures: Calculation of concentrations of CW-controlled chemicals:

a. Exclusion. No chemical may be added to the mixture (solution) for the sole purpose of circumventing the Export Administration Regulations;

b. Percent Weight Calculation. When calculating the percentage, by weight, of components in a chemical mixture, include all components of the mixture, including those that act as solvents;

c. Example.

30% chemical listed in 1C355.b.
20% chemical not listed in 1C355.b
50% Solvent
100% Mixture

30/100 = 30% chemical listed in 1C355.b.

In this example, the mixture is controlled under this entry, because a chemical listed in 1C355.b constitutes 30 percent or more of the weight of the mixture.

2. COMPOUNDS: Compounds created with any chemicals identified in this ECCN 1C355 may be shipped NLR (No License Required), without obtaining an End-Use Certificate, unless those compounds are also identified in this entry or require a license for reasons set forth elsewhere in the EAR.

Technical Notes: For purposes of this entry, a "mixture" is defined as a solid, liquid, or gaseous product made up of two or more components that do not react together under normal storage conditions.

License Exceptions

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18. In Supplement No. 1 to Part 774 (the Commerce Control List), Category 1 -- Materials, Chemicals, "Microorganisms," and "Toxins," is amended by revising ECCN 1C995 to read as follows:

1C995 Mixtures and medical, analytical, diagnostic, and food testing kits not controlled by ECCN 1C350, as follows (see List of Items controlled).

License Requirements

Reason for Control: CW, AT

Control(s) Country Chart

CW applies to 1C995.b. The Commerce Country Chart is not designed to determine licensing requirements for items controlled for CW reasons. A license is required to export CWC Schedule 2 chemicals to States not Party to the CWC (destinations not listed in Supplement No. 2 to part 745). A license is required to export CWC Schedule 3 chemicals to States not Party to the CWC, unless an End-Use Certificate issued by the government of the importing country is obtained by the exporter prior to export. (See §742.18 of the EAR for license requirements and policies for chemicals and precursors controlled for CW reasons.)

AT applies to 1C995.a. The Commerce Country Chart is not designed to determine licensing requirements for 1C995.a. A license is required for items controlled by 1C995.a to Cuba, Iran, Libya, and North Korea for anti-terrorism reasons. (See Part 746 of the EAR for additional information on Cuba, Iran, and Libya. See §742.19 of the EAR for additional information on North Korea.)

AT applies to 1C995.b AT Column 1
License Requirement Notes:

1. 1C995.b does not control mixtures excluded from the scope of ECCN 1C350 by License Requirements Note 2 of that ECCN. 1C995.a controls such mixtures, unless they are consumer goods as described in License Requirements Note 2 of this ECCN.

2. This ECCN does not control mixtures when the controlled chemicals are normal ingredients in consumer goods packaged for retail sale for personal use. Such consumer goods are classified as EAR99.

License Exceptions

LVS: N/A
GBS: N/A
CIV: N/A

List of Items Controlled

Unit: $ value

Related Controls: N/A

Related Definitions: For the purpose of this entry, "medical, analytical, diagnostic, and food testing kits" are pre-packaged materials of defined composition that are specifically developed, packaged and marketed for medical, analytical, diagnostic, or public health purposes. Replacement reagents for medical, analytical, diagnostic, and food testing kits are controlled by ECCN 1C350 if the reagents contain one or more of the precursor and intermediate chemicals identified in that ECCN in concentrations equal to or greater than those specified for mixtures in License Requirements Note 2 for that ECCN.

Items:

a. Mixtures containing concentrations of precursor or intermediate chemicals controlled by ECCN 1C350 that are below the concentration levels for mixtures indicated in the License Requirements Notes to that ECCN;

b. "Medical, analytical, diagnostic, and food testing kits" (as defined in the Related Definitions for this ECCN) that contain intermediate and precursor chemicals controlled by ECCN 1C350 and identified as Schedule 2 or 3 chemicals under the CWC in an amount not exceeding 300 grams per chemical. (ECCN 1C350 controls any such kits in which the amount of any single controlled chemical exceeds 300 grams by weight.)

19. In Supplement No. 1 to Part 774 (the Commerce Control List), Category 2 -- Materials Processing, is amended by revising the List of Items Controlled section in ECCNs 2B350 and 2B352, as follows:

2B350 Chemical manufacturing facilities and equipment, as follows (see List of Items Controlled).

Related Controls: The controls in this entry do not apply to equipment that is: a.) specially designed for use in civil applications (e.g., food processing, pulp and paper processing, or water purification); AND b.) inappropriate, by the nature of its design, for use in storing, processing, producing or conducting and controlling the flow of chemical weapons precursors controlled by 1C350.

Related Definitions: For purposes of this entry the term "chemical warfare agents" are those agents subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. (See 22 CFR part 121)

Items:

a. Reaction vessels or reactors, with or without agitators, with total internal (geometric) volume greater than 0.1 m³ (100 liters) and less than 20 m³ (20,000 liters), where all surfaces that come in direct contact with the chemical(s) being processed or contained are made from any of the following materials:

1. Alloys with more than 25% nickel and 20% chromium by weight;

2. Fluoropolymers;

3. Glass (including vitrified or enamelled coating or glass lining);

4. Nickel or alloys with more than 40% nickel by weight;

5. Tantalum or tantalum alloys;
a.6. Titanium or titanium alloys; or
a.7. Zirconium or zirconium alloys;

b. Agitators for use in reaction vessels or reactors where all surfaces of the agitator that come in direct contact with the chemical(s) being processed or contained are made from any of the following materials:
b.1. Alloys with more than 25% nickel and 20% chromium by weight;
b.2. Fluoropolymers;
b.3. Glass (including vitrified or enamelled coatings or glass lining);
b.4. Nickel or alloys with more than 40% nickel by weight;
b.5. Tantalum or tantalum alloys;
b.6. Titanium or titanium alloys; or
b.7. Zirconium or zirconium alloys;

c. Storage tanks, containers or receivers with a total internal (geometric) volume greater than 0.1 m\(^3\) (100 liters) where all surfaces that come in direct contact with the chemical(s) being processed or contained are made from any of the following materials:
c.1. Alloys with more than 25% nickel and 20% chromium by weight;
c.2. Fluoropolymers;
c.3. Glass (including vitrified or enamelled coatings or glass lining);
c.4. Nickel or alloys with more than 40% nickel by weight;
c.5. Tantalum or tantalum alloys;
c.6. Titanium or titanium alloys; or

c.7. Zirconium or zirconium alloys;

d. Heat exchangers or condensers with a heat transfer surface area of less than 20 m\(^2\) but greater than 0.15 m\(^2\), where all surfaces that come in direct contact with the chemical(s) being processed are made from any of the following materials:
d.1. Alloys with more than 25% nickel and 20% chromium by weight;
d.2. Fluoropolymers;
d.3. Glass (including vitrified or enamelled coatings or glass lining);
d.4. Graphite or carbon-graphite;
d.5. Nickel or alloys with more than 40% nickel by weight;
d.6. Silicon carbide;
d.7. Tantalum or tantalum alloys;
d.8. Titanium or titanium alloys;
d.9. Titanium carbide; or
d.10. Zirconium or zirconium alloys

e. Distillation or absorption columns of internal diameter greater than 0.1 m, where all surfaces that come in direct contact with the chemical(s) being processed are made from any of the following materials:
e.1. Alloys with more than 25% nickel and 20% chromium by weight;
e.2. Fluoropolymers;
e.3. Glass (including vitrified or enamelled coatings or glass lining);
e.4. Graphite or carbon-graphite;
e.5. Nickel or alloys with more than 40% nickel by weight;
e.6. Tantalum or tantalum alloys;
e.7. Titanium or titanium alloys; or
e.8. Zirconium or zirconium alloys;
f. Remotely operated filling equipment in which all surfaces that come in direct contact with the chemical(s) being processed are made from any of the following materials:
f.1. Alloys with more than 25% nickels and 20% chromium by weight; or
f.2. Nickel or alloys with more than 40% nickel by weight;
g. Multiple seal valves incorporating a leak detection port, bellows-seal valves, non-return (check) valves or diaphragm valves, in which all surfaces that come in to direct contact with the chemical(s) being processed or contained are made from any of the following materials:
g.1. Alloys with more than 25% nickel and 20% chromium by weight;
g.2. Fluoropolymers;
g.3. Glass (including vitrified or enamelled coatings or glass lining);
g.4. Nickel or alloys with more than 40% nickel by weight;
g.5. Tantalum or tantalum alloys;
g.6. Titanium or titanium alloys; or

h. Multi-walled piping incorporating a leak detection port, in which all surfaces that come in direct contact with the chemical(s) being processed or contained are made from any of the following materials:
h.1. Alloys with more than 25% nickel and 20% chromium by weight;
h.2. Fluoropolymers;
h.3. Glass (including vitrified or enamelled coatings or glass lining);
h.4. Graphite or carbon-graphite;
h.5. Nickel or alloys with more than 40% nickel by weight;
h.6. Tantalum or tantalum alloys;
h.7. Titanium or titanium alloys; or

i. Multiple-seal, canned drive, magnetic drive, bellows or diaphragm pumps, with manufacturer's specified maximum flow-rate greater than 0.6 m³/hour, or vacuum pumps with manufacturer's specified maximum flow-rate greater than 5 m³/hour (under standard temperature (273 K (0°C)) and pressure (101.3 kPa) conditions), in which all surfaces that come into direct contact with the chemical(s) being processed are made from any of the of the following materials:
i.1. Alloys with more than 25% nickel and 20% chromium by weight;
i.2. Ceramics;
i.3. Ferrosilicon;
i.4. Fluoropolymers;
i.5. Glass (including vitrified or enamelled coatings or glass lining);
i.6. Graphite or carbon-graphite;
i.7. Nickel or alloys with more than 40% nickel by weight;
i.8. Tantalum or tantalum alloys;
i.9. Titanium or titanium alloys, or

j. Incinerators designed to destroy chemical warfare agents, or chemical weapons precursors controlled by 1C350, having specially designed waste supply systems, special handling facilities and an average combustion chamber temperature greater than 1000°C in which all surfaces in the waste supply system that come into direct contact with the waste products are made from or lined with any of the following materials:
j.1. Alloys with more than 25% nickel and 20% chromium by weight;
j.2. Ceramics; or

j.3. Nickel or alloys with more than 40% nickel by weight.

**Technical Note:** Carbon-graphite is a composition consisting primarily of graphite and amorphous carbon, in which the graphite is 8 percent or more by weight of the composition.

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### 2B352 Equipment capable of use in handling biological materials, as follows (see List of Items Controlled).

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**List of Items Controlled**

**Unit:** Equipment in number

**Related Controls:** N/A

**Related Definitions:** For purposes of this entry, isolators include flexible isolators, dry boxes, anaerobic chambers and glove boxes.

**Items:**

a. Complete containment facilities at P3 or P4 containment level;

**Technical Note:** P3 or P4 (BL3, BL4, L3, L4) containment levels are as specified in the WHO Laboratory Biosafety Manual (Geneva, 1983).

b. Fermenters capable of cultivation of pathogenic microorganisms, viruses, or for toxin production, without the propagation of aerosols, having a capacity equal to or greater than 100 liters.

**Technical Note:** Fermenters include bioreactors, chemostats, and continuous-flow systems.

c. Centrifugal separators capable of the continuous separation of pathogenic microorganisms, without the propagation of aerosols, and having all of the following characteristics:

   c.1. One or more sealing joints within the steam containment area;
   c.2. A flow rate greater than 100 liters per hour;
   c.3. Components of polished stainless steel or titanium; and
   c.4. Capable of in situ steam sterilization in a closed state.

**Technical Note:** Centrifugal separators include decanters.

d. Cross (tangential) flow filtration equipment capable of continuous separation of pathogenic microorganisms, viruses, toxins, and cell cultures without the propagation of aerosols, having all of the following characteristics:

   d.1. Equal to or greater than 5 square meters;
   d.2. Capable of in situ sterilization.

e. Steam sterilizable freeze-drying equipment with a condenser capacity greater than 50 kgs of ice in 24 hours but less than 1,000 kgs;

f. Equipment that incorporates or is contained in P3 or P4 containment housing, as follows:

   f.1. Independently ventilated protective full or half suits;
   f.2. Class III biological safety cabinets or isolators with similar performance standards;

g. Chambers designed for aerosol challenge testing with microorganisms, viruses, or toxins and having a capacity of 1 m³ or greater.

**DATED:**

James J. Jochum

Assistant Secretary

for Export Administration