

this subpart that occur as a result of, or in conjunction with, the improper transfer.

(ii) The Administrator will issue a notice disallowing the transfer if EPA's records show that the transferor has insufficient unexpended allowances to cover the transfer claim, or that the transferor has failed to respond to one or more Agency requests to supply information needed to make a determination. The transferor may file a notice of appeal, with supporting reasons, with the Administrator within 10 working days after receipt of notification. The Administrator may affirm or vacate the disallowance. If no appeal is taken by the tenth working day after notification, the disallowance shall be final on that day.

(iii) The transferor may proceed with the transfer if the Administrator does not respond to a transfer claim within the three working days specified in paragraph (b)(4) of this section. EPA will reduce the transferor's balance of unexpended allowances by the quantity (in kilograms) to be converted plus 0.1 percent of that quantity (in kilograms). The transferor will be held liable for any violations of the regulations of this subpart that occur as a result of, or in conjunction with, the improper transfer if EPA ultimately finds that the transferor did not have sufficient unexpended allowances or credits to cover the claim.

(c) *Inter-company transfers and Inter-pollutant transfers.* If a person requests an inter-company transfer and an inter-pollutant transfer simultaneously, the quantity (in kilograms) subtracted from the transferor's unexpended production or consumption allowances for the first class II controlled substance will be equal to 100.1 percent of the quantity (in kilograms) of allowances that are being converted and transferred.

(d) A person receiving a permanent transfer of baseline production allowances or baseline consumption allowances (the transferee) for a specific class II controlled substance will be the person who has their baseline allowances adjusted in accordance with phaseout schedules in this section.

[68 FR 2848, Jan. 21, 2003]

§ 82.24 Recordkeeping and reporting requirements for class II controlled substances.

(a) *Recordkeeping and reporting.* Any person who produces, imports, exports, transforms, or destroys class II controlled substances must comply with the following recordkeeping and reporting requirements:

(1) Reports required by this section must be mailed to the Administrator within 30 days of the end of the applicable reporting period, unless otherwise specified.

(2) Revisions of reports that are required by this section must be mailed to the Administrator within 180 days of the end of the applicable reporting period, unless otherwise specified.

(3) Records and copies of reports required by this section must be retained for three years.

(4) Quantities of class II controlled substances must be stated in terms of kilograms in reports required by this section.

(5) Reports and records required by this section may be used for purposes of compliance determinations. These requirements are not intended as a limitation on the use of other evidence admissible under the Federal Rules of Evidence. Failure to provide the reports, petitions and records required by this section and to certify the accuracy of the information in the reports, petitions and records required by this section, will be considered a violation of this subpart. False statements made in reports, petitions and records will be considered violations of Section 113 of the Clean Air Act and under 18 U.S.C. 1001.

(b) *Producers.* Persons ("producers") who produce class II controlled substances during a control period must comply with the following recordkeeping and reporting requirements:

(1) *Reporting—Producers.* For each quarter, each producer of a class II controlled substance must provide the Administrator with a report containing the following information:

(i) The quantity (in kilograms) of production of each class II controlled substance used in processes resulting in their transformation by the producer and the quantity (in kilograms)

intended for transformation by a second party;

(ii) The quantity (in kilograms) of production of each class II controlled substance used in processes resulting in their destruction by the producer and the quantity (in kilograms) intended for destruction by a second party;

(iii) The expended allowances for each class II controlled substance;

(iv) The producer's total of expended and unexpended production allowances, consumption allowances, export production allowances, and Article 5 allowances at the end of that quarter;

(v) The quantity (in kilograms) of class II controlled substances sold or transferred during the quarter to a person other than the producer for use in processes resulting in their transformation or eventual destruction;

(vi) A list of the quantities and names of class II controlled substances, exported by the producer to a Party to the Protocol, that will be transformed or destroyed and therefore were not produced expending production or consumption allowances;

(vii) For transformation in the U.S. or by a person of another Party, one copy of a transformation verification from the transformer for a specific class II controlled substance and a list of additional quantities shipped to that same transformer for the quarter;

(viii) For destruction in the U.S. or by a person of another Party, one copy of a destruction verification as required in paragraph (e) of this section for a particular destroyer, destroying the same class II controlled substance, and a list of additional quantities shipped to that same destroyer for the quarter;

(ix) In cases where the producer produced class II controlled substances using export production allowances, a list of U.S. entities that purchased those class II controlled substances and exported them to a Party to the Protocol;

(x) In cases where the producer produced class II controlled substances using Article 5 allowances, a list of U.S. entities that purchased those class II controlled substances and exported them to Article 5 countries; and

(xi) A list of the HCFC 141b-exemption allowance holders from whom orders were received and the quantity (in kilograms) of HCFC-141b requested and produced.

(2) *Recordkeeping—Producers.* Every producer of a class II controlled substance during a control period must maintain the following records:

(i) Dated records of the quantity (in kilograms) of each class II controlled substance produced at each facility;

(ii) Dated records of the quantity (in kilograms) of class II controlled substances produced for use in processes that result in their transformation or for use in processes that result in their destruction;

(iii) Dated records of the quantity (in kilograms) of class II controlled substances sold for use in processes that result in their transformation or for use in processes that result in their destruction;

(iv) Dated records of the quantity (in kilograms) of class II controlled substances produced with export production allowances or Article 5 allowances;

(v) Copies of invoices or receipts documenting sale of class II controlled substances for use in processes that result in their transformation or for use in processes that result in their destruction;

(vi) Dated records of the quantity (in kilograms) of each class II controlled substance used at each facility as feedstocks or destroyed in the manufacture of a class II controlled substance or in the manufacture of any other substance, and any class II controlled substance introduced into the production process of the same class II controlled substance at each facility;

(vii) Dated records of the quantity (in kilograms) of raw materials and feedstock chemicals used at each facility for the production of class II controlled substances;

(viii) Dated records of the shipments of each class II controlled substance produced at each plant;

(ix) The quantity (in kilograms) of class II controlled substances, the date received, and names and addresses of the source of used materials containing class II controlled substances which

are recycled or reclaimed at each plant;

(x) Records of the date, the class II controlled substance, and the estimated quantity of any spill or release of a class II controlled substance that equals or exceeds 100 pounds;

(xi) Transformation verification in the case of transformation, or the destruction verification in the case of destruction as required in paragraph (e) of this section showing that the purchaser or recipient of a class II controlled substance, in the U.S. or in another country that is a Party, certifies the intent to either transform or destroy the class II controlled substance, or sell the class II controlled substance for transformation or destruction in cases when allowances were not expended;

(xii) Written verifications from a U.S. purchaser that the class II controlled substance was exported to a Party in accordance with the requirements in this section, in cases where export production allowances were expended to produce the class II controlled substance;

(xiii) Written verifications from a U.S. purchaser that the class II controlled substance was exported to an Article 5 country in cases where Article 5 allowances were expended to produce the class II controlled substance;

(xiv) Written verifications from a U.S. purchaser that HCFC-141b was manufactured for the express purpose of meeting HCFC-141b exemption needs in accordance with information submitted under § 82.16(h), in cases where HCFC-141b exemption allowances were expended to produce the HCFC-141b.

(3) For any person who fails to maintain the records required by this paragraph, or to submit the report required by this paragraph, the Administrator may assume that the person has produced at full capacity during the period for which records were not kept, for purposes of determining whether the person has violated the prohibitions at § 82.15.

(c) *Importers.* Persons (“importers”) who import class II controlled substances during a control period must comply with the following record-keeping and reporting requirements:

(1) *Reporting—Importers.* For each quarter, an importer of a class II controlled substance (including importers of used class II controlled substances) must submit to the Administrator a report containing the following information:

(i) Summaries of the records required in paragraphs (c)(2)(i) through (xvi) of this section for the previous quarter;

(ii) The total quantity (in kilograms) imported of each class II controlled substance for that quarter;

(iii) The commodity code for the class II controlled substances imported, which must be one of those listed in Appendix K to this subpart;

(iv) The quantity (in kilograms) of those class II controlled substances imported that are used class II controlled substances;

(v) The quantity (in kilograms) of class II controlled substances imported for that quarter and totaled by chemical for the control period to date;

(vi) The importer’s total sum of expended and unexpended consumption allowances by chemical as of the end of that quarter;

(vii) The quantity (in kilograms) of class II controlled substances imported for use in processes resulting in their transformation or destruction;

(viii) The quantity (in kilograms) of class II controlled substances sold or transferred during that quarter to each person for use in processes resulting in their transformation or eventual destruction; and

(ix) Transformation verifications showing that the purchaser or recipient of imported class II controlled substances intends to transform those substances or destruction verifications showing that the purchaser or recipient intends to destroy the class II controlled substances (as provided in paragraph (e) of this section).

(x) [Reserved]

(xi) A list of the HCFC 141b-exemption allowance holders from whom orders were received and the quantity (in kilograms) of HCFC-141b requested and imported.

(2) *Recordkeeping—Importers.* An importer of a class II controlled substance (including used class II controlled substances) must maintain the following records:

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(i) The quantity (in kilograms) of each class II controlled substance imported, either alone or in mixtures, including the percentage of each mixture which consists of a class II controlled substance;

(ii) The quantity (in kilograms) of those class II controlled substances imported that are used and the information provided with the petition as required under paragraph (c)(3) of this section;

(iii) The quantity (in kilograms) of class II controlled substances other than transshipments or used substances imported for use in processes resulting in their transformation or destruction;

(iv) The quantity (in kilograms) of class II controlled substances other than transshipments or used substances imported and sold for use in processes that result in their destruction or transformation;

(v) The date on which the class II controlled substances were imported;

(vi) The port of entry through which the class II controlled substances passed;

(vii) The country from which the imported class II controlled substances were imported;

(viii) The commodity code for the class II controlled substances shipped, which must be one of those listed in Appendix K to this subpart;

(ix) The importer number for the shipment;

(x) A copy of the bill of lading for the import;

(xi) The invoice for the import;

(xii) The quantity (in kilograms) of imports of used class II controlled substances;

(xiii) The U.S. Customs entry form;

(xiv) Dated records documenting the sale or transfer of class II controlled substances for use in processes resulting in their transformation or destruction;

(xv) Copies of transformation verifications or destruction verifications indicating that the class II controlled substances will be transformed or destroyed (as provided in paragraph (e) of this section).

(xvi) Written verifications from a U.S. purchaser that HCFC-141b was imported for the express purpose of meeting HCFC-141b exemption needs in ac-

cordance with information submitted under § 82.16(h), and that the quantity will not be resold, in cases where HCFC-141b exemption allowances were expended to import the HCFC-141b.

(3) *Petition to import used class II controlled substances and transshipments—Importers.* For each individual shipment over 5 pounds of a used class II controlled substance as defined in § 82.3, an importer must submit directly to the Administrator, at least 40 working days before the shipment is to leave the foreign port of export, the following information in a petition:

(i) The name and quantity (in kilograms) of the used class II controlled substance to be imported;

(ii) The name and address of the importer, the importer ID number, the contact person, and the phone and fax numbers;

(iii) Name, address, contact person, phone number and fax number of all previous source facilities from which the used class II controlled substance was recovered;

(iv) A detailed description of the previous use of the class II controlled substance at each source facility and a best estimate of when the specific controlled substance was put into the equipment at each source facility, and, when possible, documents indicating the date the material was put into the equipment;

(v) A list of the name, make and model number of the equipment from which the material was recovered at each source facility;

(vi) Name, address, contact person, phone number and fax number of the exporter and of all persons to whom the material was transferred or sold after it was recovered from the source facility;

(vii) The U.S. port of entry for the import, the expected date of shipment and the vessel transporting the chemical. If at the time of submitting a petition the importer does not know the U.S. port of entry, the expected date of shipment and the vessel transporting the chemical, and the importer receives a non-objection notice for the individual shipment in the petition, the importer is required to notify the Administrator of this information

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prior to the actual U.S. Customs entry of the individual shipment;

(viii) A description of the intended use of the used class II controlled substance, and, when possible, the name, address, contact person, phone number and fax number of the ultimate purchaser in the United States;

(ix) The name, address, contact person, phone number and fax number of the U.S. reclamation facility, where applicable;

(x) If someone at the source facility recovered the class II controlled substance from the equipment, the name and phone and fax numbers of that person;

(xi) If the imported class II controlled substance was reclaimed in a foreign Party, the name, address, contact person, phone number and fax number of any or all foreign reclamation facility(ies) responsible for reclaiming the cited shipment;

(xii) An export license from the appropriate government agency in the country of export and, if recovered in another country, the export license from the appropriate government agency in that country;

(xiii) If the imported used class II controlled substance is intended to be sold as a refrigerant in the U.S., the name and address of the U.S. reclaimer who will bring the material to the standard required under subpart F of this part, if not already reclaimed to those specifications; and

(xiv) A certification of accuracy of the information submitted in the petition.

(4) *Review of petition to import used class II controlled substances and transshipments—Importers.* Starting on the first working day following receipt by the Administrator of a petition to import a used class II controlled substance, the Administrator will initiate a review of the information submitted under paragraph(c)(3) of this section and take action within 40 working days to issue either an objection-notice or a non-objection notice for the individual shipment to the person who submitted the petition to import the used class II controlled substance.

(i) The Administrator may issue an objection notice to a petition for the following reasons:

(A) If the Administrator determines that the information is insufficient, that is, if the petition lacks or appears to lack any of the information required under paragraph (c)(3) of this section;

(B) If the Administrator determines that any portion of the petition contains false or misleading information, or the Administrator has information from other U.S. or foreign government agencies indicating that the petition contains false or misleading information;

(C) If the transaction appears to be contrary to provisions of the Vienna Convention on Substances that Deplete the Ozone Layer, the Montreal Protocol and Decisions by the Parties, or the non-compliance procedures outlined and instituted by the Implementation Committee of the Montreal Protocol;

(D) If the appropriate government agency in the exporting country has not agreed to issue an export license for the cited individual shipment of used class II controlled substance;

(E) If reclamation capacity is installed or is being installed for that specific class II controlled substance in the country of recovery or country of export and the capacity is funded in full or in part through the Multilateral Fund.

(ii) Within ten (10) working days after receipt of the objection notice, the importer may re-petition the Administrator, only if the Administrator indicated “insufficient information” as the basis for the objection notice. If no appeal is taken by the tenth working day after the date on the objection notice, the objection shall become final. Only one re-petition will be accepted for any original petition received by EPA.

(iii) Any information contained in the re-petition which is inconsistent with the original petition must be identified and a description of the reason for the inconsistency must accompany the re-petition.

(iv) In cases where the Administrator does not object to the petition based on the criteria listed in paragraph (c)(4)(i) of this section, the Administrator will issue a non-objection notice.

(v) To pass the approved used class II controlled substances through U.S.

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Customs, the petition and the non-objection notice issued by EPA must accompany the shipment through U.S. Customs.

(vi) If for some reason, following EPA's issuance of a non-objection notice, new information is brought to EPA's attention which shows that the non-objection notice was issued based on false information, then EPA has the right to:

- (A) Revoke the non-objection notice;
- (B) Pursue all means to ensure that the class II controlled substance is not imported into the U.S.; and
- (C) Take appropriate enforcement actions.

(vii) Once the Administrator issues a non-objection notice, the person receiving the non-objection notice is permitted to import the individual shipment of used class II controlled substance only within the same control period as the date stamped on the non-objection notice.

(viii) A person receiving a non-objection notice from the Administrator for a petition to import used class II controlled substances must maintain the following records:

- (A) A copy of the petition;
- (B) The EPA non-objection notice;
- (C) The bill of lading for the import; and
- (D) U.S. Customs entry documents for the import that must include one of the commodity codes from Appendix K to this subpart.

(5) Recordkeeping for transshipments—Importers. Any person who transships a class II controlled substance must maintain records that indicate:

- (i) That the class II controlled substance shipment originated in a foreign country;
- (ii) That the class II controlled substance shipment is destined for another foreign country; and
- (iii) That the class II controlled substance shipment will not enter interstate commerce within the U.S.

(d) *Exporters.* Persons ("exporters") who export class II controlled substances during a control period must comply with the following reporting requirements:

(1) *Reporting—Exporters.* For any exports of class II controlled substances

not reported under § 82.20 (additional consumption allowances), or under paragraph (b)(2) of this section (reporting for producers of class II controlled substances), each exporter who exported a class II controlled substance must submit to the Administrator the following information within 30 days after the end of each quarter in which the unreported exports left the U.S.:

- (i) The names and addresses of the exporter and the recipient of the exports;
- (ii) The exporter's Employer Identification Number;
- (iii) The type and quantity (in kilograms) of each class II controlled substance exported and what percentage, if any of the class II controlled substance is used;
- (iv) The date on which, and the port from which, the class II controlled substances were exported from the U.S. or its territories;
- (v) The country to which the class II controlled substances were exported;
- (vi) The quantity (in kilograms) exported to each Article 5 country;
- (vii) The commodity code for the class II controlled substances shipped, which must be one of those listed in Appendix K to this subpart;
- (viii) For persons reporting transformation or destruction, the invoice or sales agreement containing language similar to the transformation verifications that the purchaser or recipient of imported class II controlled substances intends to transform those substances, or destruction verifications showing that the purchaser or recipient intends to destroy the class II controlled substances (as provided in paragraph (e) of this section).

(2) *Reporting export production allowances—Exporters.* In addition to the information required in paragraph (d)(1) of this section, any exporter using export production allowances must also provide the following to the Administrator:

- (i) The Employer Identification Number on the Shipper's Export Declaration Form or Employer Identification Number of the shipping agent shown on the U.S. Customs Form 7525;
- (ii) The exporting vessel on which the class II controlled substances were shipped; and

(iii) The quantity (in kilograms) exported to each Party.

(3) *Reporting Article 5 allowances—Exporters.* In addition to the information required in paragraph (d)(1) of this section, any exporter using Article 5 allowances must also provide the following to the Administrator:

(i) The Employer Identification Number on the Shipper's Export Declaration Form or Employer Identification Number of the shipping agent shown on the U.S. Customs Form 7525; and

(ii) The exporting vessel on which the class II controlled substances were shipped.

(4) *Reporting used class II controlled substances—Exporters.* Any exporter of used class II controlled substances must indicate on the bill of lading or invoice that the class II controlled substance is used, as defined in § 82.3.

(e) *Transformation and destruction.* Any person who transforms or destroys class II controlled substances must comply with the following record-keeping and reporting requirements:

(1) *Recordkeeping—Transformation and destruction.* Any person who transforms or destroys class II controlled substances produced or imported by another person must maintain the following:

(i) Copies of the invoices or receipts documenting the sale or transfer of the class II controlled substances to the person;

(ii) Records identifying the producer or importer of the class II controlled substances received by the person;

(iii) Dated records of inventories of class II controlled substances at each plant on the first day of each quarter;

(iv) Dated records of the quantity (in kilograms) of each class II controlled substance transformed or destroyed;

(v) In the case where class II controlled substances were purchased or transferred for transformation purposes, a copy of the person's transformation verification as provided under paragraph (e)(3) of this section.

(vi) Dated records of the names, commercial use, and quantities (in kilograms) of the resulting chemical(s) when the class II controlled substances are transformed; and

(vii) Dated records of shipments to purchasers of the resulting chemical(s)

when the class II controlled substances are transformed.

(viii) In the case where class II controlled substances were purchased or transferred for destruction purposes, a copy of the person's destruction verification, as provided under paragraph (e)(5) of this section.

(2) *Reporting—Transformation and destruction.* Any person who transforms or destroys class II controlled substances and who has submitted a transformation verification ((paragraph (e)(3) of this section) or a destruction verification (paragraph (e)(5) of this section) to the producer or importer of the class II controlled substances, must report the following:

(i) The names and quantities (in kilograms) of the class II controlled substances transformed for each control period within 45 days of the end of such control period; and

(ii) The names and quantities (in kilograms) of the class II controlled substances destroyed for each control period within 45 days of the end of such control period.

(3) *Reporting—Transformation.* Any person who purchases class II controlled substances for purposes of transformation must provide the producer or importer with a transformation verification that the class II controlled substances are to be used in processes that result in their transformation.

(i) The transformation verification shall include the following:

(A) Identity and address of the person intending to transform the class II controlled substances;

(B) The quantity (in kilograms) of class II controlled substances intended for transformation;

(C) Identity of shipments by purchase order number(s), purchaser account number(s), by location(s), or other means of identification;

(D) Period of time over which the person intends to transform the class II controlled substances; and

(E) Signature of the verifying person.

(ii) [Reserved]

(4) *Reporting—Destruction.* Any person who destroys class II controlled substances shall provide EPA with a one-time report containing the following information:

- (i) The destruction unit's destruction efficiency;
- (ii) The methods used to record the volume destroyed;
- (iii) The methods used to determine destruction efficiency;
- (iv) The name of other relevant federal or state regulations that may apply to the destruction process;
- (v) Any changes to the information in paragraphs (e)(4)(i), (ii), and (iii) of this section must be reflected in a revision to be submitted to EPA within 60 days of the change(s).

(5) *Reporting—Destruction.* Any person who purchases or receives and subsequently destroys class II controlled substances that were originally produced without expending allowances shall provide the producer or importer from whom it purchased or received the class II controlled substances with a verification that the class II controlled substances will be used in processes that result in their destruction.

(i) The destruction verification shall include the following:

(A) Identity and address of the person intending to destroy class II controlled substances;

(B) Indication of whether those class II controlled substances will be completely destroyed, as defined in §82.3, or less than completely destroyed, in which case the destruction efficiency at which such substances will be destroyed must be included;

(C) Period of time over which the person intends to destroy class II controlled substances; and

(D) Signature of the verifying person.

(ii) [Reserved]

(f) *Heels—Recordkeeping and reporting.* Any person who brings into the U.S. a container with a heel, as defined in §82.3, of class II controlled substances, must comply with the following requirements:

(1) Any person who brings a container with a heel must indicate on its bill of lading or invoice that the class II controlled substance in the container is a heel.

(2) Any person who brings a container with a heel must report quarterly the quantity (in kilograms) brought into the U.S. and certify:

(i) That the residual quantity (in kilograms) in each shipment is no more

than 10 percent of the volume of the container;

(ii) That the residual quantity (in kilograms) in each shipment will either:

(A) Remain in the container and be included in a future shipment;

(B) Be recovered and transformed;

(C) Be recovered and destroyed; or

(D) Be recovered for a non-emissive use.

(3) Any person who brings a container with a heel into the U.S. must report on the final disposition of each shipment within 45 days of the end of the control period.

(g) *HCFC 141b exemption allowances—*

Reporting and recordkeeping. (1) Any person allocated HCFC-141b exemption allowances who confers a quantity of the HCFC-141b exemption allowances to a producer or import and places an order for the production or import of HCFC-141b with a verification that the HCFC-141b will only be used for the exempted purpose and not be resold must submit semi-annual reports, due 30 days after the end of the second and fourth respectively, to the Administrator containing the following information:

(i) Total quantity (in kilograms) HCFC-141b received during the 6 month period; and

(ii) The identity of the supplier of HCFC-141b on a shipment-by-shipment basis during the 6 month period.

(2) Any person allocated HCFC-141b exemption allowances must keep records of letters to producers and importers conferring unexpended HCFC-141b exemption allowances for the specified control period in the notice, orders for the production or import of HCFC-141b under those letters and written verifications that the HCFC-141b was produced or imported for the express purpose of meeting HCFC-141b exemption needs in accordance with information submitted under §82.16(h), and that the quantity will not be resold.

[68 FR 2848, Jan. 21, 2003]

APPENDIX A TO SUBPART A OF PART 82—
CLASS I CONTROLLED SUBSTANCES

Class 1 controlled substances	ODP
A. Group I:	

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Class 1 controlled substances	ODP
CFC1 ₃ -Trichlorofluoromethane (CFC-II)	1.0
CF ₂ Cl ₂ -Dichlorodifluoromethane (CFC-12)	1.0
C ₂ F ₃ Cl ₃ -Trichlorotrifluoroethane (CFC-113)	0.8
C ₂ F ₄ Cl ₂ -Dichlorotetrafluoroethane (CFC-114)	1.0
C ₂ F ₅ Cl-Monochloropentafluoroethane (CFC-115)	0.6
All isomers of the above chemicals	
B. Group II:	
CF ₂ ClBr-Bromochlorodifluoromethane (Halon-1211)	3.0
CF ₃ Br-Bromotrifluoromethane (Halon-1301)	10.0
C ₂ F ₄ Br ₂ -Dibromotetrafluoroethane (Halon-2402)	6.0
All isomers of the above chemicals	
C. Group III:	
CF ₃ Cl-Chlorotrifluoromethane (CFC-13)	1.0
C ₂ FCl ₃ -(CFC-111)	1.0
C ₂ F ₂ Cl ₂ -(CFC-112)	1.0
C ₃ FCl ₂ -(CFC-211)	1.0
C ₃ F ₂ Cl-(CFC-212)	1.0
C ₃ F ₃ Cl ₂ -(CFC-213)	1.0
C ₃ F ₄ Cl-(CFC-214)	1.0
C ₃ F ₅ Cl ₂ -(CFC-215)	1.0
C ₃ F ₆ Cl ₂ -(CFC-216)	1.0
C ₃ F ₇ Cl-(CFC-217)	1.0
All isomers of the above chemicals	
D. Group IV: CCl ₄ -Carbon Tetrachloride	1.1
E. Group V:	
C ₂ H ₃ Cl ₃ -1,1,1 Trichloroethane (Methyl chloroform)	0.1
All isomers of the above chemical except 1,1,2-trichloroethane	
F. Group VI: CH ₃ Br—Bromomethane (Methyl Bromide)	0.7
G. Group VII:	
CHFBR ₂	1.00
CHF ₂ Br (HBFC-2201)	0.74
CH ₂ FBr	0.73
C ₂ HFBr ₄	0.3-0.8
C ₂ HF ₂ Br ₃	0.5-1.8
C ₂ HF ₃ Br ₂	0.4-1.6
C ₂ HF ₄ Br	0.7-1.2
C ₂ H ₂ FBr ₃	0.1-1.1
C ₂ H ₂ F ₂ Br ₂	0.2-1.5
C ₂ H ₂ F ₃ Br	0.7-1.6
C ₂ H ₂ FBr ₂	0.1-1.7
C ₂ H ₃ F ₂ Br	0.2-1.1
C ₂ H ₄ FBr	0.07-0.1
C ₃ HFBr ₆	0.3-1.5
C ₃ HF ₂ Br ₅	0.2-1.9
C ₃ HF ₃ Br ₄	0.3-1.8
C ₃ HF ₄ Br ₃	0.5-2.2
C ₃ HF ₅ Br ₂	0.9-2.0
C ₃ HF ₆ Br	0.7-3.3
C ₃ H ₂ FBR ₅	0.1-1.9
C ₃ H ₂ F ₂ BR ₄	0.2-2.1
C ₃ H ₂ F ₃ BR ₃	0.2-5.6
C ₃ H ₂ F ₄ BR ₂	0.3-7.5
C ₃ H ₂ F ₅ BR	0.9-14
C ₃ H ₃ FBR ₄	0.08-1.9
C ₃ H ₃ F ₂ BR ₃	0.1-3.1
C ₃ H ₃ F ₃ BR ₂	0.1-2.5
C ₃ H ₃ F ₄ BR	0.3-4.4
C ₃ H ₄ FBR ₃	0.03-0.3
C ₃ H ₄ F ₂ BR ₂	0.1-1.0
C ₃ H ₄ F ₃ BR	0.07-0.8
C ₃ H ₅ FBR ₂	0.04-0.4
C ₃ H ₅ F ₂ BR	0.07-0.8
C ₃ H ₆ FB	0.02-0.7
H. Group VIII:	
CH ₂ BrCl (Chlorobromomethane)	0.12.

[60 FR 24986, May 10, 1995, as amended at 68 FR 42892, July 18, 2003]

APPENDIX B TO SUBPART A OF PART 82—
CLASS II CONTROLLED SUBSTANCES^a

Controlled Substance	ODP
1. Dichlorofluoromethane (HCFC-21)	0.04
2. Monochlorodifluoromethane (HCFC-22).	0.055
3. Monochlorofluoromethane (HCFC-31)	0.02
4. Tetrachlorofluoroethane (HCFC-121) ..	0.01-0.04
5. Trichlorodifluoroethane (HCFC-122) ...	0.02-0.08
6. Dichlorotrifluoroethane (HCFC-123)	0.02
7. Monochlorotetrafluoroethane (HCFC-124).	0.022
8. Trichlorofluoroethane (HCFC-131)	0.007-0.05
9. Dichlorodifluoroethane (HCFC-132)	0.008-0.05
10. Monochlorotrifluoroethane (HCFC-133).	0.02-0.06
11. Dichlorofluoroethane (HCFC-141b) ...	0.11
12. Monochlorodifluoroethane (HCFC-142b).	0.065
13. Chlorofluoroethane (HCFC-151)	0.003-0.005
14. Hexachlorofluoropropane (HCFC-221).	0.015-0.07
15. Pentachlorodifluoropropane (HCFC-222).	0.01-0.09
16. Tetrachlorotrifluoropropane (HCFC-223).	0.01-0.08
17. Trichlorotetrafluoropropane (HCFC-224).	0.01-0.09
18. Dichloropentafluoropropane (HCFC-225ca).	0.025
19. Dichloropentafluoropropane (HCFC-225cb).	0.033
20. Monochlorohexafluoropropane (HCFC-226).	0.02-0.10
21. Pentachlorofluoropropane (HCFC-231).	0.05-0.09
22. Tetrachlorodifluoropropane (HCFC-232).	0.008-0.10
23. Trichlorotrifluoropropane (HCFC-233)	0.007-0.23
24. Dichlorotetrafluoropropane (HCFC-234).	0.01-0.28
25. Monochloropentafluoropropane (HCFC-235).	0.03-0.52
26. Tetrachlorofluoropropane (HCFC-241).	0.004-0.09
27. Trichlorodifluoropropane (HCFC-242)	0.005-0.13
28. Dichlorotrifluoropropane (HCFC-243)	0.007-0.12
29. Monochlorotetrafluoropropane (HCFC-244).	0.009-0.14
30. Trichlorofluoropropane (HCFC-251) ..	0.001-0.01
31. Dichlorodifluoropropane (HCFC-252)	0.005-0.04
32. Monochlorotrifluoropropane (HCFC-253).	0.003-0.03
33. Dichlorofluoropropane (HCFC-261) ..	0.002-0.02
34. Monochlorodifluoropropane (HCFC-262).	0.002-0.02
35. Monochlorofluoropropane (HCFC-271).	0.001-0.03

^aAccording to Annex C of the Montreal Protocol, "Where a range of ODPs is indicated, the highest value in that range shall be used for the purposes of the Protocol. The ODPs listed as a single value have been determined from calculations based on laboratory measurements. Those listed as a range are based on estimates and are less certain. The range pertains to an isomeric group. The upper value is the estimate of the ODP of the isomer with the highest ODP, and the lower value is the estimate of the ODP of the isomer with the lowest ODP."

[68 FR 2859, Jan. 21, 2003]

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40 CFR Ch. I (7-1-06 Edition)

APPENDIX C TO SUBPART A OF PART 82—
PARTIES TO THE MONTREAL PRO-
TOCOL, AND NATIONS COMPLYING
WITH, BUT NOT PARTIES TO, THE
PROTOCOL

Amendment package. Amendment packages are identified by the name of the city where the amendment package was negotiated and agreed. Updated lists of Parties to the Protocol and the Amendments can be located at: <http://www.unep.org/ozone/ratif.shtml>.

ANNEX 1 TO APPENDIX C OF SUBPART A—PAR-
TIES TO THE MONTREAL PROTOCOL (AS OF
JANUARY 29, 2003)

The check mark [✓] means the particular country ratified the Protocol or the specific

Foreign state	Montreal protocol	London amendments	Copenhagen amendments	Montreal amendments	Beijing amendments
Albania	✓				
Algeria	✓	✓	✓		
Angola	✓				
Antigua and Barbuda	✓	✓	✓	✓	
Argentina	✓	✓	✓	✓	
Armenia	✓				
Australia	✓	✓	✓	✓	
Austria	✓	✓	✓	✓	
Azerbaijan	✓	✓	✓	✓	
Bahamas	✓	✓	✓		
Bahrain	✓	✓	✓	✓	
Bangladesh	✓	✓	✓	✓	
Barbados	✓	✓	✓	✓	✓
Belarus	✓	✓			
Belgium	✓	✓	✓		
Belize	✓	✓	✓		
Benin	✓	✓	✓		
Bolivia	✓	✓	✓	✓	
Bosnia and Herzegovina	✓				
Botswana	✓	✓	✓		
Brazil	✓	✓	✓		
Brunei Darussalam	✓				
Bulgaria	✓	✓	✓	✓	✓
Burkina Faso	✓	✓	✓	✓	✓
Burundi	✓	✓	✓	✓	✓
Cambodia	✓				
Cameroon	✓	✓	✓		
Canada	✓	✓	✓	✓	✓
Cape Verde	✓	✓	✓	✓	
Central African Republic	✓				
Chad	✓	✓	✓	✓	
Chile	✓	✓	✓	✓	✓
China	✓				
Colombia	✓	✓	✓		
Comoros	✓	✓	✓	✓	✓
Congo	✓	✓	✓	✓	✓
Congo, Democratic Republic of	✓	✓	✓		
Costa Rica	✓	✓	✓		
Cote d'Ivoire	✓	✓	✓		
Croatia	✓	✓	✓	✓	✓
Cuba	✓	✓	✓		
Cyprus	✓	✓	✓		
Czech Republic	✓	✓	✓	✓	✓
Denmark	✓	✓	✓		
Djibouti	✓	✓	✓	✓	
Dominica	✓	✓			
Dominican Republic	✓	✓	✓		
Ecuador	✓	✓	✓		
Egypt	✓	✓	✓	✓	
El Salvador	✓	✓	✓	✓	
Estonia	✓	✓	✓		
Ethiopia	✓				
European Community	✓	✓	✓	✓	✓
Federated States of Micronesia	✓	✓	✓	✓	✓
Fiji	✓	✓	✓		
Finland	✓	✓	✓	✓	✓
France	✓	✓	✓	✓	✓
Gabon	✓	✓	✓		
Gambia	✓	✓	✓		

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Foreign state	Montreal protocol	London amendments	Copenhagen amendments	Montreal amendments	Beijing amendments
Georgia	✓	✓	✓	✓	
Germany	✓	✓	✓	✓	✓
Ghana	✓	✓	✓		
Greece	✓	✓	✓		
Grenada	✓	✓	✓	✓	
Guatemala	✓	✓	✓	✓	✓
Guinea	✓	✓	✓		
Guinea Bissau	✓	✓	✓	✓	✓
Guyana	✓	✓	✓	✓	
Haiti	✓	✓	✓	✓	
Honduras	✓	✓	✓		
Hungary	✓	✓	✓	✓	✓
Iceland	✓	✓	✓	✓	
India	✓	✓	✓		
Indonesia	✓	✓	✓		
Iran, Islamic	✓	✓	✓	✓	
Ireland	✓	✓	✓		
Israel	✓	✓	✓		
Italy	✓	✓	✓	✓	
Jamaica	✓	✓	✓		
Japan	✓	✓	✓	✓	✓
Jordan	✓	✓	✓	✓	✓
Kazakhstan	✓	✓			
Kenya	✓	✓	✓	✓	
Kiribati	✓	✓			
Korea, Democratic People's Republic of ..	✓	✓	✓	✓	✓
Korea, Republic of	✓	✓	✓	✓	
Kuwait	✓	✓	✓		
Kyrgyzstan	✓	✓			
Lao, People's Democratic Republic	✓				
Latvia	✓	✓	✓	✓	
Lebanon	✓	✓	✓	✓	
Lesotho	✓	✓			
Liberia	✓	✓	✓		
Libyan Arab Jamahiriya	✓	✓			
Liechtenstein	✓	✓	✓		
Lithuania	✓	✓	✓		
Luxembourg	✓	✓	✓	✓	✓
Madagascar	✓	✓	✓	✓	✓
Malawi	✓	✓	✓		
Malaysia	✓	✓	✓	✓	✓
Maldives	✓	✓	✓	✓	✓
Mali	✓	✓	✓		
Malta	✓	✓	✓		
Marshall Islands	✓	✓	✓		
Mauritania	✓	✓			
Mauritius	✓	✓	✓		
Mexico	✓	✓	✓		
Moldova	✓	✓	✓		
Monaco	✓	✓	✓	✓	
Mongolia	✓	✓	✓	✓	
Morocco	✓	✓	✓		
Mozambique	✓	✓	✓		
Myanmar	✓	✓	✓		
Namibia	✓	✓	✓		
Nauru	✓	✓	✓		
Nepal	✓	✓	✓		
Netherlands	✓	✓	✓	✓	✓
New Zealand	✓	✓	✓	✓	✓
Nicaragua	✓	✓	✓		
Niger	✓	✓	✓	✓	
Nigeria	✓	✓	✓	✓	
Norway	✓	✓	✓	✓	✓
Oman	✓	✓	✓		
Pakistan	✓	✓	✓		
Palau	✓	✓	✓	✓	✓
Panama	✓	✓	✓	✓	✓
Papua New Guinea	✓	✓	✓		
Paraguay	✓	✓	✓	✓	
Peru	✓	✓	✓		
Philippines	✓	✓	✓	✓	
Poland	✓	✓	✓		
Portugal	✓	✓	✓		

Foreign state	Montreal protocol	London amendments	Copenhagen amendments	Montreal amendments	Beijing amendments
Qatar	✓	✓	✓		
Romania	✓	✓	✓	✓	
Russian Federation	✓	✓			
Rwanda	✓				
Saint Kitts & Nevis	✓	✓	✓	✓	
Saint Lucia	✓	✓	✓	✓	✓
Saint Vincent and the Grenadines	✓	✓	✓		
Samoa	✓	✓	✓	✓	✓
Sao Tome and Principe	✓	✓	✓	✓	✓
Saudi Arabia	✓	✓	✓		
Senegal	✓	✓	✓	✓	
Seychelles	✓	✓	✓	✓	✓
Sierra Leone	✓	✓	✓	✓	✓
Singapore	✓	✓	✓	✓	
Slovakia	✓	✓	✓	✓	✓
Slovenia	✓	✓	✓	✓	✓
Solomon Island	✓	✓	✓	✓	
Somalia	✓	✓	✓	✓	✓
South Africa	✓	✓	✓		
Spain	✓	✓	✓	✓	✓
Sri Lanka	✓	✓	✓	✓	✓
Sudan	✓	✓	✓		
Suriname	✓				
Swaziland	✓				
Sweden	✓	✓	✓	✓	✓
Switzerland	✓	✓	✓	✓	✓
Syrian Arab Republic	✓	✓	✓	✓	
Tajikistan	✓	✓	✓		
Tanzania, United Republic of	✓	✓	✓	✓	✓
Thailand	✓	✓	✓		
The Former Yugoslav Republic of Macedonia	✓	✓	✓	✓	✓
Togo	✓	✓	✓	✓	✓
Tonga	✓				
Trinidad and Tobago	✓	✓	✓	✓	
Tunisia	✓	✓	✓	✓	
Turkey	✓	✓	✓		
Turkmenistan	✓	✓	✓		
Tuvalu	✓	✓	✓	✓	
Uganda	✓	✓	✓	✓	
Ukraine	✓	✓	✓		
United Arab Emirates	✓				
United Kingdom	✓	✓	✓	✓	✓
United States of America	✓	✓	✓		
Uruguay	✓	✓	✓	✓	
Uzbekistan	✓	✓	✓		
Vanuatu	✓	✓	✓		
Venezuela	✓	✓	✓	✓	
Viet Nam	✓	✓	✓		
Yemen	✓	✓	✓	✓	
Yugoslavia	✓				
Zambia	✓	✓			

ANNEX 2 TO APPENDIX C OF SUBPART A—NATIONS COMPLYING WITH, BUT NOT PARTIES TO, THE PROTOCOL [RESERVED]

Annex 3 to Appendix C of Subpart A: Nations that are Parties to the Montreal Protocol that have not yet Ratified all applicable Amendments to the Protocol but have Notified the Ozone Secretariat and Properly Submitted Supporting Documentation in Accordance with the Requirements of Decision XV/3.

Non-article 5 parties	Party to the Copenhagen amendment	Party to the Beijing Amendment	Parties that have submitted data in accordance with Dec. XV/3, para 1 (c)(iii)		
			1(c)(ii)	1(c)(ii), Article 2, 2A-2G	1(c)(ii), Article 4
Australia	Yes	No	Yes	Yes	Yes
Austria	Yes	No.			
Azerbaijan	Yes	No.			
Belarus	No	No.			
Belgium	Yes	No.			
Bulgaria	Yes	Yes.			

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Non-article 5 parties	Party to the Copenhagen amendment	Party to the Beijing Amendment	Parties that have submitted data in accordance with Dec. XV/3, para 1 (c)(iii)		
			1(c)(ii)	1(c)(ii), Article 2, 2A-2G	1(c)(ii), Article 4
Canada	Yes	Yes.			
Czech Republic	Yes	Yes.			
Denmark	Yes	Yes.			
Estonia	Yes	No.			
European Community	Yes	Yes.			
Finland	Yes	Yes.			
France	Yes	Yes.			
Germany	Yes	Yes.			
Greece	Yes	No	Yes	Yes	Yes
Hungary	Yes	Yes.			
Iceland	Yes	Yes.			
Ireland	Yes	No.			
Israel	Yes	No.			
Italy	Yes	No	Yes	Yes	Yes
Japan	Yes	Yes.			
Kazakhstan	No	No	Yes	Yes	Yes
Latvia	Yes	No.			
Liechtenstein	Yes	Yes.			
Lithuania	Yes	No	Yes.		
Luxembourg	Yes	Yes.			
Monaco	Yes	Yes.			
Netherlands	Yes	Yes.			
New Zealand	Yes	Yes.			
Norway	Yes	Yes.			
Poland	Yes	No	Yes	Yes	Yes
Portugal	Yes	No	Yes	Yes	Yes
Russian Federation	No	No.			
Slovakia	Yes	Yes.			
Slovenia	Yes	Yes.			
Spain	Yes	Yes.			
Sweden	Yes	Yes.			
Switzerland	Yes	Yes.			
Tajikistan	No	No.			
Turkmenistan	No	No.			
Ukraine	Yes	No.			
United Kingdom	Yes	Yes.			
United States of America	Yes	Yes.			
Uzbekistan	Yes	No.			

ANNEX 4 TO APPENDIX C OF SUBPART A: NATIONS THAT ARE PARTIES TO THE MONTREAL PROTOCOL AND ARE OPERATING UNDER ARTICLE 5(1)

LIST OF ARTICLE 5 PARTIES

List of Parties Classified as Operating Under Article 5 of the Montreal Protocol

1. Albania
2. Algeria
3. Angola
4. Antigua and Barbuda
5. Argentina
6. Armenia
7. Bahamas
8. Bahrain
9. Bangladesh
10. Barbados
11. Belize
12. Benin
13. Bolivia
14. Bosnia and Herzegovina
15. Botswana
16. Brazil
17. Brunei Darussalam
18. Burkina Faso
19. Burundi
20. Cambodia
21. Cameroon

22. Central African Republic
23. Chad
24. Chile
25. China
26. Colombia
27. Comoros
28. Congo
29. Congo, Democratic Republic of
30. Costa Rica
31. Côte d'Ivoire
32. Croatia
33. Cuba
34. Cyprus
35. Djibouti
36. Dominica
37. Dominican Republic
38. Ecuador
39. Egypt
40. El Salvador
41. Ethiopia
42. Federated States of Micronesia
43. Fiji
44. Gabon
45. Gambia
47. Ghana
48. Grenada
49. Guatemala
50. Guinea
51. Guyana
52. Haiti
53. Honduras
54. India
55. Indonesia
56. Iran, Islamic Republic of
57. Jamaica
58. Jordan
59. Kenya
60. Kiribati
61. Korea, Democratic People's Republic of
63. Kuwait
64. Kyrgyzstan
65. Lao People's Democratic Republic
66. Lebanon
67. Lesotho
68. Liberia
69. Libyan Arab Jamahiriya
70. Madagascar
71. Malawi
72. Malaysia
73. Maldives
74. Mali
75. Malta
76. Marshall Islands
77. Mauritania
78. Mauritius
79. Mexico
80. Moldova
81. Mongolia
82. Morocco
83. Mozambique
84. Myanmar
85. Namibia
86. Nauru
87. Nepal
88. Nicaragua
89. Niger
90. Nigeria

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91. Oman
92. Pakistan
93. Palau
94. Panama
95. Papua New Guinea
96. Paraguay
97. Peru
98. Philippines
99. Qatar
100. Romania
101. Rwanda
102. Saint Kitts and Nevis
103. Saint Lucia
104. Saint Vincent and the Grenadines
105. Samoa
106. Saudi Arabia
107. Senegal
108. Serbia and Montenegro
109. Seychelles
110. Sierra Leone
111. Singapore
112. Solomon Islands
113. Somalia
114. South Africa
115. Sri Lanka
116. Sudan
117. Suriname
118. Swaziland
119. Syrian Arab Republic
120. Tanzania, United Republic of
121. Thailand
122. The Former Yugoslav Republic of Macedonia
123. Togo
124. Tonga
125. Trinidad and Tobago
126. Tunisia
127. Turkey
128. Tuvalu
129. Uganda
130. United Arab Emirates
131. Uruguay
132. Vanuatu
133. Venezuela
134. Viet Nam
135. Yemen
136. Zambia
137. Zimbabwe

List of Parties Temporarily Classified as Operating Under Article 5 of the Montreal Protocol

1. Cape Verde
2. Cook Islands
3. Guinea Bissau
4. Niue
5. Sao Tome and Principe

[68 FR 43936, July 25, 2003, as amended at 69 FR 34031, June 17, 2004]

APPENDIX D TO SUBPART A OF PART 82—
HARMONIZED TARIFF SCHEDULE DE-
SCRIPTION OF PRODUCTS THAT MAY
CONTAIN CONTROLLED SUBSTANCES
IN APPENDIX A, CLASS I, GROUPS I
AND II

This Appendix is based on information provided by the Ozone Secretariat of the United Nations Ozone Environment Programme.** The Appendix lists available U.S. harmonized tariff schedule codes identifying headings and subheadings for Annex D products that may contain controlled substances.

The Harmonized Tariff Schedule of the United States uses an enumeration system to identify products imported and exported to and from the U.S. This system relies on a four digit heading, a four digit subheading and additional two digit statistical suffix to characterize products. The United States uses the suffix for its own statistical records and analyses. This Appendix lists only headings and subheadings.

While some can be readily associated with harmonized system codes, many products cannot be tied to HS classifications unless their exact composition and the presentation are known. It should be noted that the specified HS classifications represent the most likely headings and subheadings which may contain substances controlled by the Montreal Protocol. The codes given should only be used as a starting point; further verification is needed to ascertain whether or not the products actually contain controlled substances.

CATEGORY 1. AUTOMOBILE AND TRUCK AIR
CONDITIONING UNITS (WHETHER INCORPORATED IN VEHICLES OR NOT)

There are no separate code numbers for air conditioning units specially used in automobiles and trucks. Although a code has been proposed for car air conditioners, it is not yet officially listed in the Harmonized Tariff Schedule (see category 2). The following codes apply to the vehicles potentially containing air conditioning units.

<i>Heading/Subheading</i>	<i>Article Description</i>
8701.(10, 20, 30, 90)***	Tractors.
8702	Public-transport type passenger motor vehicles.
8702.10	With compression-ignition internal-combustion piston engine (diesel or semi-diesel).
8702.90	Other.
8703	Motor cars and other motor vehicles principally designed for the transport of persons (other than those of heading 8702), including station wagons and racing cars.
8703.10	Vehicles specially designed for traveling on snow; golf carts and similar vehicles; includes subheading 10.10 and 10.50.
8703.(21, 22, 23, 24)	Other vehicles, with spark-ignition internal combustion reciprocating engines.
8703.(31, 32, 33, 90)	Other vehicles, with compression-ignition internal combustion piston engine (diesel or semi-diesel).
8704	Motor vehicles for the transport of goods.
8704.10.(10, 50)	Dumpers designed for off-highway use.
8704.(21, 22, 23)	Other, with compression-ignition internal combustion piston engine (diesel or semi-diesel).
8704.(31, 32, 90)	Other, with compression-ignition internal combustion piston engine.
8705	Special purpose motor vehicles, other than those principally designed for the transport of persons or goods (for example, wreckers, mobile cranes, fire fighting vehicles, concrete mixers, road sweepers, spraying vehicles, mobile workshops, mobile radiological units).
8705.10	Crane lorries.
8705.20	Mobile drilling derricks.
8705.30	Fire fighting vehicles.
8705.90	Other.

***At this time vehicle air conditioning units are considered components of vehicles or are classified under the general category for air conditioning and refrigeration equipment. Vehicles containing air conditioners are therefore considered products containing controlled substances.

** "A Note Regarding the Harmonized System Code Numbers for the Products Listed in Annex D." Adopted by Decision IV/15 para-

graph 3, of the Fourth Meeting of the Parties in Copenhagen, 23-25 November, 1992.

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CATEGORY 2. DOMESTIC AND COMMERCIAL REFRIGERATION AND AIR CONDITIONING/HEAT PUMP EQUIPMENT

Domestic and commercial air conditioning and refrigeration equipment fall primarily under headings 8415 and 8418.

<i>Heading/Subheading</i>	<i>Article Description</i>
8415	Air conditioning machines, comprising a motor-driven fan and elements for changing the temperature and humidity, including those machines in which the humidity cannot be separately regulated.
8415.20	Proposed code for air conditioning of a kind used for persons, in motor vehicles.
8415.10.00	A/C window or wall types, self-contained.
8415.81.00	Other, except parts, incorporating a refrigerating unit and a valve for reversal of the cooling/heat cycle.
8415.82.00	Other, incorporating a refrigerating unit— Self-contained machines and remote condenser type air conditioners (not for year-round use). Year-round units (for heating and cooling). Air Conditioning evaporator coils. Dehumidifiers. Other air conditioning machines incorporating a refrigerating unit.
8415.83	Automotive air conditioners.
8418	Refrigerators, freezers and other refrigerating or freezing equipment, electric or other; heat pumps, other than air conditioning machines of heading 8415; parts thereof.
8418.10.00	Combined refrigerator-freezers, fitted with separate external doors.
8418.21.00	Refrigerators, household type, Compression type.
8418.22.00	Absorption type, electrical.
8418.29.00	Other.
8418.30.00	Freezers of the chest type.
8418.40	Freezers of the upright type.
8418.50.0040	Other refrigerating or freezing chests, cabinets, display counters, showcases and similar refrigerating or freezing furniture.
8418.61.00	Other refrigerating or freezing equipment; heat pumps.
8418.69	Other— Icemaking machines. Drinking water coolers, self-contained. Soda fountain and beer dispensing equipment. Centrifugal liquid chilling refrigerating units. Absorption liquid chilling units. Reciprocating liquid chilling units. Other refrigerating or freezing equipment (household or other).
8479.89.10	Dehumidifiers (other than those under 8415 or 8424 classified as “machines and mechanical appliances having individual functions, not specified or included elsewhere”).

CATEGORY 3. AEROSOL PRODUCTS

An array of different products use controlled substances as aerosols and in aerosol applications. Not all aerosol applications use controlled substances, however. The codes given below represent the most likely classifications for products containing controlled substances. The product codes listed include ****:

**** Other categories of products that may contain controlled substances are listed

below. EPA is currently working to match them with appropriate codes. They include: coatings and electronic equipment (e.g., electrical motors), coatings or cleaning fluids for aircraft maintenance, mold release agents (e.g. for production of plastic or elastomeric materials), water and oil repellent (potentially under HS 3402), spray undercoats (potentially under “paints and varnishes”), spot removers, brake cleaners, safety sprays (e.g., mace cans), animal repellent, noise horns

Continued

- varnishes
- perfumes
- preparations for use on hair
- preparations for oral and dental hygiene
- shaving preparations
- personal deodorants, bath preparations
- prepared room deodorizers
- soaps
- lubricants

- polishes and creams
- explosives
- insecticides, fungicides, herbicides, disinfectants
- arms and ammunition
- household products such as footwear or leather polishes
- other miscellaneous products

<i>Heading/Subheading</i>	<i>Article Description</i>
3208	Paints and varnishes ***** (including enamels and lacquers) based on synthetic polymers of chemically modified natural polymers, dispersed or dissolved in a non-aqueous medium.
3208.10	Based on polyesters.
3208.20	Based on acrylic or vinyl polymers.
3208.90	Other.
3209	Paints and varnishes (including enamels and lacquers) based on synthetic polymers or chemically modified natural polymers, dispersed or dissolved in an aqueous medium.
3209.10	Based on acrylic or vinyl polymers.
3209.90	Other.
3210.00	Other paints and varnishes (including enamels, lacquers and distempers) and prepared water pigments of a kind used for finishing leather.
3212.90	Dyes and other coloring matter put up in forms or packings for retail sale.
3303.00	Perfumes and toilet waters.
3304.30	Manicure or pedicure preparations.
3305.10	Shampoos.
3305.20	Preparations for permanent waving or straightening.
3305.30	Hair lacquers.
3305.90	Other hair preparations.
3306.10	Dentrifices.
3306.90	Other dental (this may include breath sprays).
3307.10	Pre-shave, shaving or after-shave preparations.
3307.20	Personal deodorants and antiperspirants.
3307.30	Perfumed bath salts and other bath preparations.
3307.49	Other (this may include preparations for perfuming or deodorizing rooms, including odoriferous preparations used during religious rites, whether or not perfumed or having disinfectant properties).
3307.90	Other (this may include depilatory products and other perfumery, cosmetic or toilet preparations, not elsewhere specified or included)
3403	Lubricating preparations (including cutting-oil preparations, bolt or nut release preparations, anti-rust or anti-corrosion preparations and mould release preparations, based on lubricants), and preparations of a kind used for the oil or grease treatment of textile materials, leather, fur skins or other materials, but excluding preparations containing, as basic constituents, 70 percent or more by weight of petroleum oils or of oils obtained from bituminous minerals.
3402	Organic surface-active agents (other than soap); surface-active preparations, washing preparations and cleaning operations, whether or not containing soap, other than those of 3401.
3402.20	Preparations put up for retail sale.

(e.g., for use on boats), weld inspection developers, freezants, gum removers, intruder alarms, tire inflators, dusters (for electronic

and non-electronic applications), spray shoe polish, and suede protectors.

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<i>Heading/Subheading</i>	<i>Article Description</i>
3402.19	Other preparations containing petroleum oils or oils obtained from bituminous minerals.
3403	Lubricating preparations consisting of mixtures containing silicone greases or oils, as the case may be.
2710.00	Preparations not elsewhere specified or included, containing by weight 70 percent or more of petroleum oils or of oils obtained from bituminous minerals, these oils being the basic constituents of the preparations.
3403.11	Lubricants containing petroleum oils or oils obtained from bituminous minerals used for preparations from the treatment of textile materials, leather, fur skins or other materials.
3403.19	Other preparations containing petroleum oils or oils obtained from bituminous minerals.
3405	Polishes and creams, for footwear, furniture, floors, coachwork, glass or metal, scouring pastes and powders and similar preparations excluding waxes of heading 3404.
3405.10	Polishes and creams for footwear or leather.
3405.20	Polishes for wooden furniture, floors or other woodwork.
36	Explosives.
3808	Insecticides, rodenticides, fungicides, herbicides, anti-sprouting products and plant-growth regulators, disinfectants and similar products, put up in forms or packings for retail sale or as preparations or articles (for example, sulphur-treated bands, wicks and candles, and fly papers).
3808.10	Insecticides.
3808.20	Fungicides.
3808.30	Herbicides, anti-sprouting products and plant growth regulators.
3808.40	Disinfectants.
3808.90	Other insecticides, fungicides.
3809.10	Finishing agents, dye carriers to accelerate the dyeing or fixing of dye-stuffs and other products and preparations (for example, dressings and mordants) of a kind used in the textile, paper, leather or like industries, not elsewhere specified or included, with a basis of amylaceous substances.
3814	Organic composite solvents and thinners (not elsewhere specified or included) and the prepared paint or varnish removers.
3910	Silicones in primary forms.
9304	Other arms (for example, spring, air or gas guns and pistols, truncheons), excluding those of heading No. 93.07. Thus, aerosol spray cans containing tear gas may be classified under this subheading.
0404.90	Products consisting of natural milk constituents, whether or not containing added sugar or other sweetening matter, not elsewhere specified or included.
1517.90	Edible mixtures or preparations of animal or vegetable fats or oils or of fractions of different fats or oils of this chapter, other than edible fats or oils or their fractions of heading No. 15.16.
2106.90	Food preparations not elsewhere specified or included.

***** Although paints do not generally use contain controlled substances, some varnishes use CFC 113 and 1,1,1, trichlorethane as solvents.

CATEGORY 4. PORTABLE FIRE EXTINGUISHERS

<i>Heading/Subheading</i>	<i>Article Description</i>
8424	Mechanical appliances (whether or not hand operated) for projecting, dispersing, or spraying liquids or powders; fire extinguishers whether or not charged, spray guns and similar appliances; steam or sand blasting machines and similar jet projecting machines.
8424.10	Fire extinguishers, whether or not charged.

CATEGORY 5. INSULATION BOARDS, PANELS AND PIPE COVERS

made of polyurethane, polystyrene, polyolefin and phenolic plastics, then they may be classified Chapter 39, for "Plastics and articles thereof". The exact description of the products at issue is necessary before a classification can be given.*****

These goods have to be classified according to their composition and presentation. For example, if the insulation materials are

<i>Heading/Subheading</i>	<i>Article Description</i>
3917.21 to 3917.39	Tubes, pipes and hoses of plastics.
3920.10 to 3920.99	Plates, sheets, film, foil and strip made of plastics, non-cellular and not reinforced, laminated, supported or similarly combined with other materials.
3921.11 to 3921.90	Other plates, sheets, film, foil and strip, made of plastics.
3925.90	Builders' ware made of plastics, not elsewhere specified or included.
3926.90	Articles made of plastics, not elsewhere specified or included.

CATEGORY 6. PRE-POLYMERS

According to the Explanatory Notes to the Harmonized Commodity Description and Coding System, "prepolymers are products which are characterized by some repetition of monomer units although they may contain unreacted monomers. Prepolymers are not normally used as such but are intended

to be transformed into higher molecular weight polymers by further polymerization. Therefore the term does not cover finished products, such as di-isobutylenes or mixed polyethylene glycols with very low molecular weight. Examples are epoxides based with epichlorohydrin, and polymeric isocyanates."

<i>Heading/Subheading</i>	<i>Article Description</i>
3901	Pre-polymers based on ethylene (in primary forms).
3902	Pre-polymers based on propylene or other olefins (in primary forms).
3903, 3907, 3909	Pre-polymers based on styrene (in primary forms), epoxide and phenols.

APPENDIX E TO SUBPART A OF PART 82—ARTICLE 5 PARTIES

Algeria, Antigua and Barbuda, Argentina, Bahamas, Bahrain, Bangladesh, Barbados, Benin, Bolivia, Bosnia and Hersegovina, Botswana, Brazil, Brunei Darussalam, Burkina Faso, Cameroon, Central African Republic, Chad, Chile, China, Colombia, Comoros, Congo, Costa Rica, Cote d'Ivoire, Croatia, Cuba, Dominica, Dominican Republic, Ecuador, Egypt, El Salvador, Ethiopia, Fiji,

Gabon, Gambia, Ghana, Grenada, Guatemala, Guinea, Guyana, Honduras, India, Indonesia, Iran, Jamaica, Jordan, Kenya, Kiribati, Lebanon, Lesotho, Libyan Arab Jamahiriya, Macadonia, Malawi, Malaysia, Maldives, Mali, Malta, Mauritania, Mauritius, Mexico, Mozambique, Myranmar, Namibia, Nepal, Nicaragua, Niger, Nigeria, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Republic of Korea, Romania, Saint Kitts and Nevis, Saint Lucia, Saudi Arabia, Senegal, Seychelles,

*****This category may include insulating board for building panels and windows and doors. It also includes rigid appliance insulation for pipes, tanks, trucks, trailers,

containers, train cars & ships, refrigerators, freezers, beverage vending machines, bulk beverage dispensers, water coolers and heaters and ice machines.

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Singapore, Solomon Islands, Somoa, Sri Lanka, Sudan, Swaziland, Syrian Arab Republic, Tanzania, Thailand, Togo, Trinidad and Tobago, Tunisia, Turkey, Uganda, Uruguay, Vanuatu, Venezuela, Viet Nam, Yugoslavia, Zaire, Zambia, Zimbabwe.

APPENDIX F TO SUBPART A OF PART 82—LISTING OF OZONE-DEPLETING CHEMICALS

Controlled substance	ODP	AT L	CLP	BLP
A. Class I:				
1. Group I:				
CFCl ₃ -Trichlorofluoromethane (CFC-11)	1.0	60.0	1.0	0.00
CF ₂ Cl ₂ -Dichlorodifluoromethane (CFC-12)	1.0	120.0	1.5	0.00
C ₂ F ₃ Cl ₂ -Trichlorotrifluoroethane (CFC-113) ...	0.8	90.0	1.11	0.00
C ₂ F ₄ Cl ₂ -Dichlorotetrafluoroethane (CFC-114)	1.0	200.00	1.8	0.00
C ₂ F ₅ Cl-Monochloropentafluoroethane (CFC-115)	0.6	400.0	2.0	0.00
All isomers of the above chemicals		[Reserved]		
2. Group II:				
CF ₂ ClBr-Bromochlorodifluoromethane (Halon-1211)	3.0	12	0.06	0.13
		-18	-.08	-.03
CF ₃ Br-Bromotrifluoromethane (Halon-1301) ...	10.0	72	0.00	1.00
		-107		
C ₂ F ₄ Br ₂ -Dibromotetrafluoroethane (Halon-2402)	6.0	23	0.00	0.30
		-28		-.37
All isomers of the above chemicals		[Reserved]		
3. Group III:				
CF ₃ Cl-Chlorotrifluoromethane (CFC-13)	1.0	120	0.88	0.00
	-250	-1.83		
C ₂ FCl ₅ - (CFC-111)	1.0	60	1.04	0.00
	-90	-1.56		
C ₂ F ₂ Cl ₄ - (CFC-112)	1.0	60	0.90	0.00
	-90	-1.35		
C ₃ FCl ₇ - (CFC-211)	1.0	100	1.76	0.00
	-500	-8.81		
C ₃ F ₂ Cl ₆ - (CFC-212)	1.0	100	1.60	0.00
	-500	-7.98		
C ₃ F ₃ Cl ₅ - (CFC-213)	1.0	100	1.41	0.00
	-500	-7.06		
C ₃ F ₄ Cl ₄ - (CFC-214)	1.0	100	1.20	0.00
	-500	-6.01		
C ₃ F ₅ Cl ₃ - (CFC-215)	1.0	100	0.96	0.00
	-500	-4.82		
C ₃ F ₆ Cl ₂ - (CFC-216)	1.0	100	0.69	0.00
	-500	-3.45		
C ₃ F ₇ Cl- (CFC-217)	1.0	100	0.37	0.00
	-500	-1.87		
All isomers of the above chemicals		[Reserved]		
4. Group IV:				
CCl ₄ -Carbon Tetrachloride	1.1	50.0	1.0	0.00
5. Group V:				
C ₂ H ₃ Cl ₃ -1,1,1 Trichloroethane (Methyl chloroform)	0.1	6.3	0.11	0.00
All isomers of the above chemical except 1,1,2-trichloroethane		[Reserved]		
6. Group VI:				
CH ₃ Br-Bromomethane (Methyl Bromide)	0.7		[Reserved]	
7. Group VII:				
CHFBr ₂ -	1.00		[Reserved]	
CHF ₂ Br-(HBFC-22B1)	0.74		[Reserved]	
CH ₂ FBr	0.73		[Reserved]	
C ₂ HFBr ₄	0.3-0.8		[Reserved]	
C ₂ HF ₂ Br ₃	0.5-1.8		[Reserved]	
C ₂ HF ₃ Br ₂	0.4-1.6		[Reserved]	
C ₂ HF ₄ Br	0.7-1.2		[Reserved]	
C ₃ H ₃ FBr ₃	0.1-1.1		[Reserved]	
C ₃ H ₂ F ₂ Br ₂	0.2-1.5		[Reserved]	
C ₃ H ₂ F ₃ Br	0.7-1.6		[Reserved]	
C ₃ H ₃ FBr ₂	0.1-1.7		[Reserved]	
C ₃ H ₄ F ₂ Br	0.2-1.1		[Reserved]	
C ₃ H ₄ FBr	0.07-0.1		[Reserved]	
C ₃ HFBr ₆	0.3-1.5		[Reserved]	
C ₃ HF ₂ Br ₅	0.2-1.9		[Reserved]	

Controlled substance	ODP	AT L	CLP	BLP
C ₃ HF ₃ Br ₄	0.3-1.8	.....	[Reserved]	
C ₃ HF ₄ Br ₃	0.5-2.2	.....	[Reserved]	
C ₃ HF ₅ Br ₂	0.9-2.0	.....	[Reserved]	
C ₃ HF ₆ Br	0.7-3.3	.....	[Reserved]	
C ₃ H ₂ FBr ₅	0.1-1.9	.....	[Reserved]	
C ₃ H ₂ F ₂ Br ₄	0.2-2.1	.....	[Reserved]	
C ₃ H ₂ F ₃ Br ₃	0.2-5.6	.....	[Reserved]	
C ₃ H ₂ F ₄ Br ₂	0.3-7.5	.....	[Reserved]	
C ₃ H ₂ F ₅ Br	0.9-1.4	.....	[Reserved]	
C ₃ H ₂ FBR ₄	0.08-1.9	.....	[Reserved]	
C ₃ H ₂ F ₂ Br ₃	0.1-3.1	.....	[Reserved]	
C ₃ H ₂ F ₃ Br ₂	0.1-2.5	.....	[Reserved]	
C ₃ H ₂ F ₄ Br	0.3-4.4	.....	[Reserved]	
C ₃ H ₄ FBr ₃	0.03-0.3	.....	[Reserved]	
C ₃ H ₄ F ₂ Br ₂	0.1-1.0	.....	[Reserved]	
C ₃ H ₄ F ₃ Br	0.07-0.8	.....	[Reserved]	
C ₃ H ₄ FBr ₂	0.04-0.4	.....	[Reserved]	
C ₃ H ₄ F ₂ Br	0.07-0.8	.....	[Reserved]	
C ₃ H ₄ FB	0.02-0.7	.....	[Reserved]	
8. Group VIII:				
CH ₂ BrCl (Chlorobromomethane)	0.12	.....	[Reserved]	
B. Class II:				
CHFCl ₂ -Dichlorofluoromethane (HCFC-21)	[Reserved]	2.1	0.03	0.00
CHF ₂ Cl-Chlorodifluoromethane (HCFC-22)		15.3	0.14	0.00
CH ₂ FCl-Chlorofluoromethane (HCFC-31)	[Reserved]	1.44	0.02	0.00
C ₂ HFCI ₄ - (HCFC-121)	[Reserved]	0.6	0.01	0.00
C ₂ HFC ₂ Cl ₃ - (HCFC-122)	[Reserved]	1.4	0.02	0.00
C ₂ HFC ₃ Cl ₂ - (HCFC-123)		1.6	0.016	0.00
C ₂ HFC ₄ Cl- (HCFC-124)		0.02	6.6	0.04
C ₂ H ₂ FCl ₃ - (HCFC-131)	[Reserved]	4.0	0.06	0.00
C ₂ H ₂ F ₂ Cl ₂ - (HCFC-132b)	[Reserved]	4.2	0.05	0.00
C ₂ H ₂ F ₃ Cl- (HCFC-133a)	[Reserved]	4.8	0.03	0.00
C ₂ H ₃ FCl ₃ - (HCFC-141b)		0.12	7.8	0.10
C ₂ H ₃ F ₂ Cl- (HCFC-142b)		0.06	19.1	0.14
C ₃ HFCI ₆ - (HCFC-221)	[Reserved]	.....	.....	0.00
C ₃ HFC ₂ Cl ₅ - (HCFC-222)	[Reserved]	.....	.....	0.00
C ₃ HFC ₃ Cl ₄ - (HCFC-223)	[Reserved]	.....	.....	0.00
C ₃ HFC ₄ Cl ₃ - (HCFC-224)	[Reserved]	.....	.....	0.00
C ₃ HFC ₅ Cl ₂ - (HCFC-225ca)	[Reserved]	1.5	0.01	0.00
.....		-1.7		
(HCFC-225cb)	[Reserved]	5.1	0.04	0.00
C ₃ HFC ₆ Cl- (HCFC-226)	[Reserved]	.....	.....	0.00
C ₃ H ₂ FCl ₅ - (HCFC-231)	[Reserved]	.....	.....	0.00
C ₃ H ₂ F ₂ Cl ₄ - (HCFC-232)	[Reserved]	.....	.....	0.00
C ₃ H ₂ F ₃ Cl ₃ - (HCFC-233)	[Reserved]	.....	.....	0.00
C ₃ H ₂ F ₄ Cl ₂ - (HCFC-234)	[Reserved]	.....	.....	0.00
C ₃ H ₂ F ₅ Cl- (HCFC-235)	[Reserved]	.....	.....	0.00
C ₃ H ₃ FCl ₄ - (HCFC-241)	[Reserved]	.....	.....	0.00
C ₃ H ₃ F ₂ Cl ₃ - (HCFC-242)	[Reserved]	.....	.....	0.00
C ₃ H ₃ F ₃ Cl ₂ - (HCFC-243)	[Reserved]	.....	.....	0.00
C ₃ H ₃ F ₄ Cl- (HCFC-244)	[Reserved]	.....	.....	0.00
C ₃ H ₄ FCl ₃ - (HCFC-251)	[Reserved]	.....	.....	0.00
C ₃ H ₄ F ₂ Cl ₂ - (HCFC-252)	[Reserved]	.....	.....	0.00
C ₃ H ₄ F ₃ Cl- (HCFC-253)	[Reserved]	.....	.....	0.00
C ₃ H ₅ FCl ₂ - (HCFC-261)	[Reserved]	.....	.....	0.00
C ₃ H ₅ F ₂ Cl- (HCFC-262)	[Reserved]	.....	.....	0.00
C ₃ H ₆ FCl- (HCFC-271)	[Reserved]	.....	.....	0.00
All isomers of the above chemicals			[Reserved]	

[60 FR 24986, May 10, 1995, as amended at 68 FR 42894, July 18, 2003]

APPENDIX G TO SUBPART A OF PART 82—
 UNEP RECOMMENDATIONS FOR CON-
 DITIONS APPLIED TO EXEMPTION FOR
 ESSENTIAL LABORATORY AND ANA-
 LYTICAL USES

1. Essential laboratory and analytical uses are identified at this time to include equipment calibration; use as extraction solvents, diluents, or carriers for chemical analysis;

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biochemical research; inert solvents for chemical reactions, as a carrier or laboratory chemical and other critical analytical and laboratory purposes. Pursuant to Decision XI/15 of the Parties to the Montreal Protocol, effective January 1, 2002 the following uses of class I controlled substances are not considered essential under the global laboratory exemption:

- a. Testing of oil and grease and total petroleum hydrocarbons in water;
- b. Testing of tar in road-paving materials; and
- c. Forensic finger printing.

Production for essential laboratory and analytical purposes is authorized provided that these laboratory and analytical chemicals shall contain only controlled substances manufactured to the following purities:

- CTC (reagent grade)—99.5
- 1,1,1,-trichloroethane—99.5
- CFC-11—99.5
- CFC-13—99.5
- CFC-12—99.5
- CFC-113—99.5
- CFC-114—99.5
- Other w/ Boiling P>20 degrees C—99.5
- Other w/ Boiling P<20 degrees C—99.0

2. These pure, controlled substances can be subsequently mixed by manufacturers, agents or distributors with other chemicals controlled or not controlled by the Montreal Protocol as is customary for laboratory and analytical uses.

3. These high purity substances and mixtures containing controlled substances shall be supplied only in re-closable containers or high pressure cylinders smaller than three litres or in 10 millilitre or smaller glass ampoules, marked clearly as substances that deplete the ozone layer, restricted to laboratory use and analytical purposes and specifying that used or surplus substances should be collected and recycled, if practical. The material should be destroyed if recycling is not practical.

4. Parties shall annually report for each controlled substance produced: the purity; the quantity; the application, specific test standard, or procedure requiring its uses; and the status of efforts to eliminate its use in each application. Parties shall also submit copies of published instructions, standards, specifications, and regulations requiring the use of the controlled substance.

[60 FR 24986, May 10, 1995, as amended at 67 FR 6362, Feb. 11, 2002]

**APPENDIX H TO SUBPART A OF PART 82—CLEAN AIR ACT AMENDMENTS OF 1990
PHASEOUT SCHEDULE FOR PRODUCTION OF OZONE-DEPLETING SUBSTANCES**

Date	Carbon tetra-chloride (percent)	Methyl chloro-form (percent)	Other class sub-stances (percent)	Date	Carbon tetra-chloride (percent)	Methyl chloro-form (percent)	Other class sub-stances (percent)
1994	70	85	65	1998	15	50	15
1995	15	70	50	1999	15	50	15
1996	15	50	40	2000		20	
1997	15	50	15	2001		20	

APPENDIX I TO SUBPART A OF PART 82—GLOBAL WARMING POTENTIALS (MASS BASIS), REFERENCED TO THE ABSOLUTE GWP FOR THE ADOPTED CARBON CYCLE MODEL CO₂ DECAY RESPONSE AND FUTURE CO₂ ATMOSPHERIC CONCENTRATIONS HELD CONSTANT AT CURRENT LEVELS. (ONLY DIRECT EFFECTS ARE CONSIDERED.)

Species (chemical)	Chemical formula	Global warming potential (time horizon)		
		20 years	100 years	500 years
CFC-11	CFCl ₃	5000	4000	1400
CFC-12	CF ₂ Cl ₂	7900	8500	4200
CFC-13	CClF ₃	8100	11700	13600
CFC-113	C ₂ F ₃ Cl ₃	5000	5000	2300
CFC-114	C ₂ F ₄ Cl ₂	6900	9300	8300
CFC-115	C ₂ F ₅ Cl	6200	9300	13000
H-1301	CF ₃ Br	6200	5600	2200
Carbon Tet	CCl ₄	2000	1400	500
Methyl Chl	CH ₃ CCl ₃	360	110	35
HCFC-22	CF ₂ HCl	4300	1700	520
HCFC-141b	C ₂ FH ₃ Cl ₂	1800	630	200
HCFC-142b	C ₂ F ₂ H ₃ Cl	4200	2000	630
HCFC-123	C ₂ F ₃ HCl ₂	300	93	29

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Species (chemical)	Chemical formula	Global warming potential (time horizon)		
		20 years	100 years	500 years
HCFC-124	C ₂ F ₄ HCl	1500	480	150
HCFC-225ca	C ₃ F ₅ HCl ₂	550	170	52
HCFC-225cb	C ₃ F ₅ HCl ₂	1700	530	170

United Nations Environment Programme (UNEP), February 1995, Scientific Assessment of Ozone Depletion: 1994, Chapter 13, "Ozone Depleting Potentials, Global Warming Potentials and Future Chlorine/Bromine Loading," and do not reflect review of scientific documents published after that date.

[61 FR 1285, Jan. 19, 1996]

APPENDIX J TO SUBPART A OF PART 82—PARTIES TO THE MONTREAL PROTOCOL CLASSIED UNDER ARTICLE 5(1) THAT HAVE BANNED THE IMPORT OF CONTROLLED PRODUCTS THAT RELY ON CLASS I CONTROLLED SUBSTANCES FOR THEIR CONTINUING FUNCTIONING [RESERVED]

APPENDIX K TO SUBPART A OF PART 82—COMMODITY CODES FROM THE HARMONIZED TARIFF SCHEDULE FOR CONTROLLED SUBSTANCES AND USED CONTROLLED SUBSTANCES

Description of commodity or chemical	Commodity code from harmonized tariff schedule
CFC-11	2903.41.0000
CFC-12	2903.42.0000
CFC-113	2903.43.0000
CFC-114	2903.44.0010
CFC-115	2903.44.0020
HALONS	2903.46.0000
CFC-13, CFC-111, CFC-112, CFC-211, CFC-212, CFC-213, CFC-214, CFC-215, CFC-216, CFC-217	2903.45.0000
HCFC-22	2903.49.9010
HCFC-21, HCFC-31, HCFC-123, HCFC-124, HCFC-133, HCFC-141b, HCFC-142b, HCFC-225	2903.49.0000
OTHER, HALOGENATED	2903.49.9060
MIXTURES (R-500, R-502, ETC.)	3824.71.0000
MIXTURES, OTHER	3824.79.0000
CARBON TETRACHLORIDE	2903.14.0000
METHYL CHLOROFORM	2903.19.6010
METHYL BROMIDE	2903.30.1520

[63 FR 41651, Aug. 4, 1998]

APPENDIX L TO PART 82 SUBPART A—APPROVED CRITICAL USES, AND LIMITING CRITICAL CONDITIONS FOR THOSE USES FOR THE 2006 CONTROL PERIOD

Column A Approved critical uses	Column B Approved critical user and location of use	Column C Limiting critical conditions
Pre-Plant Uses: Cucurbits	(a) Michigan growers	with a reasonable expectation that moderate to severe soilborne fungal disease infestation, or moderate to severe disease infestation could occur without methyl bromide fumigation; or with a need for methyl bromide for research purposes.
	(b) Southeastern U.S. except Georgia limited to growing locations in Alabama, Arkansas, Kentucky, Louisiana, North Carolina, South Carolina, Tennessee, and Virginia.	with a reasonable expectation that one or more of the following limiting critical conditions either already exist or could occur without methyl bromide fumigation: moderate to severe yellow or purple nutsedge infestation, or to a lesser extent: fungal disease infestation and root knot nematodes; or with a need for methyl bromide for research purposes.

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Column A Approved critical uses	Column B Approved critical user and location of use	Column C Limiting critical conditions
Eggplant	<p>(c) Georgia growers</p> <p>(a) Florida growers</p> <p>(b) Georgia growers</p> <p>(c) Michigan growers</p>	<p>with a reasonable expectation that one or more of the following limiting critical conditions either already exist or could occur without methyl bromide fumigation: moderate to severe yellow or purple nutsedge infestation, moderate to severe fungal disease infestation, or to a lesser extent: root knot nematodes; or with a need for methyl bromide for research purposes.</p> <p>with a reasonable expectation that one or more of the following limiting critical conditions either already exist or could occur without methyl bromide fumigation: moderate to severe yellow or purple nutsedge infestation, or moderate to severe nematodes, or moderate to severe disease infestation, or restrictions on alternatives due to karst geology; or with a need for methyl bromide for research purposes.</p> <p>with a reasonable expectation that one or more of the following limiting critical conditions either already exist or could occur without methyl bromide fumigation: moderate to severe yellow or purple nutsedge infestation, or moderate to severe nematodes, or moderate to severe pythium root and collar rots, or moderate to severe southern blight infestation, and to a lesser extent: crown and root rot; or with a need for methyl bromide for research purposes.</p> <p>with a reasonable expectation that moderate to severe soilborne fungal disease infestation could occur without methyl bromide fumigation; or with a need for methyl bromide for research purposes.</p>
Forest Nursery Seedlings.	<p>(a) Members of the Southern Forest Nursery Management Cooperative limited to growing locations in Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas and Virginia.</p> <p>(b) International Paper and its subsidiaries limited to growing locations in Alabama, Arkansas, Georgia, South Carolina and Texas.</p> <p>(c) Public (government owned) seedling nurseries in the states of Illinois, Indiana, Kentucky, Maryland, Missouri, New Jersey, Ohio, Pennsylvania, West Virginia and Wisconsin.</p> <p>(d) Weyerhaeuser Company and its subsidiaries limited to growing locations in Alabama, Arkansas, North Carolina and South Carolina.</p> <p>(e) Weyerhaeuser Company and its subsidiaries limited to growing locations in Washington and Oregon.</p>	<p>with a reasonable expectation that one or more of the following limiting critical conditions already either exist or could occur without methyl bromide fumigation: moderate to severe yellow or purple nutsedge infestation, or moderate to severe disease infestation.</p> <p>with a reasonable expectation that one or more of the following limiting critical conditions already either exist or could occur without methyl bromide fumigation: moderate to severe yellow or purple nutsedge infestation, or moderate to severe disease infestation, or moderate to severe nematodes, and to a lesser extent: fungal disease infestation.</p> <p>with a reasonable expectation that one or more of the following limiting critical conditions already either exist or could occur without methyl bromide fumigation: moderate to severe yellow or purple nutsedge infestation, moderate to severe disease infestation, and to a lesser extent: nematodes and worms.</p> <p>with a reasonable expectation that one or more of the following limiting critical conditions already either exist or could occur without methyl bromide fumigation: moderate to severe yellow nutsedge infestation, or moderate to severe fungal disease infestation.</p>

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Orchard Nursery Seedlings.	(f) Michigan growers	with a reasonable expectation that one or more of the following limiting critical conditions already exist or could occur without methyl bromide fumigation: moderate to severe disease infestation, moderate to severe Canada thistle infestation, moderate to severe nutsedge infestation, and to a lesser extent: nematodes.
	(g) Michigan herbaceous perennials growers	with a reasonable expectation that one or more of the following limiting critical conditions already exist or could occur without methyl bromide fumigation: moderate to severe nematodes, moderate to severe fungal disease infestation, and to a lesser extent: yellow nutsedge and other weeds infestation.
	(a) Members of the Western Raspberry Nursery Consortium limited to growing locations in California and Washington (Driscoll's Raspberries and their contract growers in California and Washington).	with a reasonable expectation that one or more of the following limiting critical conditions already exist or could occur without methyl bromide fumigation: moderate to severe nematode infestation, medium to heavy clay soils, or a prohibition on the use of 1,3-dichloropropene products due to reaching local township limits on the use of this alternative, or with a need for methyl bromide for research purposes.
	(b) Members of the California Association of Nurserymen-Deciduous Fruit and Nut Tree Growers.	with a reasonable expectation that one or more of the following limiting critical conditions already exist or could occur without methyl bromide fumigation: moderate to severe nematodes, medium to heavy clay soils, or a prohibition on the use of 1,3-dichloropropene products due to reaching local township limits on the use of this alternative, or with a need for methyl bromide for research purposes.
	(c) California rose nurseries	with a reasonable expectation that one or more of the following limiting critical conditions already exist or could occur without methyl bromide fumigation: moderate to severe nematodes, or user may be prohibited from using 1,3-dichloropropene products because local township limits for this alternative have been reached, or with a need for methyl bromide for research purposes.
Strawberry Nurseries ...	(a) California growers	with a reasonable expectation that one or more of the following limiting critical conditions already exist or could occur without methyl bromide fumigation: moderate to severe disease infestation, or moderate to severe yellow or purple nutsedge infestation, or moderate to severe nematodes; or with a need for methyl bromide for research purposes.
	(b) North Carolina, Tennessee and Maryland growers.	with a reasonable expectation that one or more of the following limiting critical conditions already exist or could occur without methyl bromide fumigation: moderate to severe black root rot, or moderate to severe root-knot nematodes, or moderate to severe yellow and purple nutsedge infestation, and to a lesser extent: crown rot; or with a need for methyl bromide for research purposes.

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Orchard Replant	(a) California stone fruit growers	with a reasonable expectation that one or more of the following limiting critical conditions already either exists or could occur without methyl bromide fumigation: moderate to severe nematodes, or moderate to severe fungal disease infestation, or replanted (non virgin) orchard soils to prevent orchard replant disease, or medium to heavy soils, or a prohibition on the use of 1,3-dichloropropene products because local township limits for this alternative have been reached; or with a need for methyl bromide for research purposes.
	(b) California table and raisin grape growers	with a reasonable expectation that one or more of the following limiting critical conditions already either exists or could occur without methyl bromide fumigation: moderate to severe nematodes, or moderate to severe fungal disease infestation, or replanted (non-virgin) orchard soils to prevent orchard replant disease, or medium to heavy soils, or a prohibition on the use of 1,3-dichloropropene products because local township limits for this alternative have been reached; or with a need for methyl bromide for research purposes.
	(c) California walnut growers	with a reasonable expectation that one or more of the following limiting critical conditions already either exists or could occur without methyl bromide fumigation: moderate to severe nematodes, or replanted (non-virgin) orchard soils to prevent orchard replant disease, or medium to heavy soils, or a prohibition on the use of 1,3- dichloropropene products because local township limits for this alternative have been reached; or with a need for methyl bromide for research purposes.
	(d) California almond growers	with a reasonable expectation that one or more of the following limiting critical conditions already either exists or could occur without methyl bromide fumigation: moderate to severe nematodes, or replanted (non-virgin) orchard soils to prevent orchard replant disease, or medium to heavy soils, or a prohibition on the use of 1,3-dichloropropene products because local township limits for this alternative have been reached; or with a need for methyl bromide for research purposes.
Ornamentals	(a) California growers	with a reasonable expectation that one or more of the following limiting critical conditions already either exists or could occur without methyl bromide fumigation: moderate to severe disease infestation, or moderate to severe nematodes, or a prohibition on the use of 1,3-dichloropropene products because local township limits for this alternative have been reached; or with a need for methyl bromide for research purposes.
	(b) Florida growers	with a reasonable expectation that one or more of the following limiting critical conditions already either exists or could occur without methyl bromide fumigation: moderate to severe weed infestation, or moderate to severe disease infestation, or moderate to severe nematodes, or karst topography; or with a need for methyl bromide for research purposes.

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Peppers	<p>(a) California growers</p> <p>(b) Alabama, Arkansas, Kentucky, Louisiana, North Carolina, South Carolina, Tennessee and Virginia growers.</p> <p>(c) Florida growers</p> <p>(d) Georgia growers</p> <p>(e) Michigan growers</p>	<p>with a reasonable expectation that one or more of the following limiting critical conditions already either exists or could occur without methyl bromide fumigation: moderate to severe disease infestation, or moderate to severe nematodes, or a prohibition on the use of 1,3-dichloropropene products because local township limits for this alternative have been reached; or with a need for methyl bromide for research purposes.</p> <p>with a reasonable expectation that one or more of the following limiting critical conditions already either exists or could occur without methyl bromide fumigation: moderate to severe yellow or purple nutsedge infestation, or moderate to severe nematodes, or moderate to severe pythium root, collar, crown and root rots, or the presence of an occupied structure within 100 feet of a grower's field the size of 100 acres or less; or with a need for methyl bromide for research purposes.</p> <p>with a reasonable expectation that one or more of the following limiting critical conditions already either exists or could occur without methyl bromide fumigation: moderate to severe yellow or purple nutsedge infestation, or moderate to severe disease infestation, or moderate to severe nematodes, or karst topography; or with a need for methyl bromide for research purposes.</p> <p>with a reasonable expectation that one or more of the following limiting critical conditions either already exist or could occur without methyl bromide fumigation: moderate to severe yellow or purple nutsedge infestation, or moderate to severe nematodes, or moderate to severe pythium root and collar rots, or moderate to severe southern blight infestation, and to a lesser extent: crown and root rot; or with a need for methyl bromide for research purposes.</p> <p>with a reasonable expectation that moderate to severe fungal disease infestation would occur without methyl bromide fumigation; or with a need for methyl bromide for research purposes.</p>
Strawberry Fruit	<p>(a) California growers</p> <p>(b) Florida growers</p>	<p>with a reasonable expectation that one or more of the following limiting critical conditions already either exists or could occur without methyl bromide fumigation: moderate to severe black root rot or crown rot, or moderate to severe yellow or purple nutsedge infestation, or moderate to severe nematodes, or a prohibition of the use of 1,3-dichloropropene products because local township limits for this alternative have been reached, time to transition to an alternative; or with a need for methyl bromide for research purposes.</p> <p>with a reasonable expectation that one or more of the following limiting critical conditions already either exists or could occur without methyl bromide fumigation: moderate to severe yellow or purple nutsedge, or moderate to severe nematodes, or moderate to severe disease infestation, or karst topography and to a lesser extent: carolina geranium or cut-leaf evening primrose infestation; or with a need for methyl bromide for research purposes.</p>

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Tomatoes	<p>(c) Alabama, Arkansas, Georgia, Illinois, Kentucky, Louisiana, Maryland, New Jersey, North Carolina, Ohio, South Carolina, Tennessee and Virginia growers.</p> <p>(a) Michigan growers</p> <p>(b) Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, North Carolina, South Carolina, and Tennessee.</p> <p>(c) California growers</p>	<p>with a reasonable expectation that one or more of the following limiting critical conditions already either exists or could occur without methyl bromide fumigation: moderate to severe yellow or purple nutsedge, or moderate to severe nematodes, or moderate to severe black root and crown rot, or the presence of an occupied structure within 100 feet of a grower's field the size of 100 acres or less; or with a need for methyl bromide for research purposes.</p> <p>with a reasonable expectation that one or more of the following limiting critical conditions already either exists or could occur without methyl bromide fumigation: moderate to severe disease infestation, or moderate to severe fungal pathogen infestation; or with a need for methyl bromide for research purposes.</p> <p>with a reasonable expectation that one or more of the following limiting critical conditions already either exists or could occur without methyl growers bromide fumigation: moderate to severe yellow or purple nutsedge infestation, or moderate to severe disease infestation, or moderate to severe nematodes, or the presence of an occupied structure within 100 feet of a grower's field the size of 100 acres or less, or karst topography; or with a need for methyl bromide for research purposes.</p> <p>with a reasonable expectation that one or more of the following limiting critical conditions already either exists or could occur without methyl bromide fumigation: moderate to severe disease infestation, or moderate to severe nematodes; or with a need for methyl bromide for research purposes.</p>
Turfgrass	<p>(a) U.S. turfgrass sod nursery producers who are members of Turfgrass Producers International (TPI).</p>	<p>for the production of industry certified pure sod; with a reasonable expectation that one or more of the following limiting critical conditions already either exists or could occur without methyl bromide fumigation: moderate to severe bermudagrass, nutsedge and off-type perennial grass infestation, or moderate to severe white grub infestation; or with a need for methyl bromide for research purposes.</p>
Post-Harvest Uses: Food Processing	<p>(a) Rice millers in all locations in the U.S. who are members of the USA Rice Millers' Association.</p> <p>(b) Pet food manufacturing facilities in the U.S. who are active members of the Pet Food Institute. (For this rule, "pet food" refers to domestic dog and cat food).</p>	<p>with a reasonable expectation that one or more of the following limiting critical conditions exists: moderate to severe infestation of beetles, weevils or moths, or older structures that can not be properly sealed to use an alternative to methyl bromide, or the presence of sensitive electronic equipment subject to corrosivity, time to transition to an alternative.</p> <p>with a reasonable expectation that one or more of the following limiting critical conditions exists: moderate to severe infestation or beetles, moths, or cockroaches, or older structures that can not be properly sealed to use an alternative to methyl bromide, or the presence of sensitive electronic equipment subject to corrosivity, time to transition to an alternative.</p>

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	(c) Kraft Foods in the U.S (d) Members of the North American Millers' Association in the U.S. (e) Members of the National Pest Management Association treating cocoa beans in storage and associated spaces and equipment in processed food, cheese, dried milk, herbs and spices and spaces and equipment in associated processing facilities.	with a reasonable expectation that one or more of the following limiting critical conditions exists: older structures that can not be properly sealed to use an alternative to methyl bromide, or the presence of sensitive electronic equipment subject to corrosivity, time to transition to an alternative. with a reasonable expectation that one or more of the following limiting critical conditions already exists or could occur without methyl bromide fumigation: moderate to severe beetle infestation, or older structures that can not be properly sealed to use an alternative to methyl bromide, or the presence of sensitive electronic equipment subject to corrosivity, time to transition to an alternative. with a reasonable expectation that one or more of the following limiting critical conditions already exists or could occur without methyl bromide fumigation: moderate to severe pest infestation, or older structures that can not be properly sealed to use an alternative to methyl spaces and bromide, or the presence of sensitive equipment in electronic equipment subject to corrosivity, time to transition to an alternative.
Commodity Storage	(a) California entities storing walnuts, beans, dried plums, figs, raisins, dates and pistachios in California.	with a reasonable expectation that one or more of the following limiting critical conditions exists: rapid fumigation is required to meet a critical market window, such as during the holiday season, rapid fumigation is required when a buyer provides short (2 working days or less) notification for a purchase, or there is a short period after harvest in which to fumigate and there is limited silo availability for using alternatives; or with a need for methyl bromide for research purposes.
Dry Cured Pork Products.	(a) Members of the National Country Ham Association. (b) Members of the American Association of Meat Processors. (c) Nahunta Pork Center (North Carolina)	with a reasonable expectation that one or more of the following limiting critical conditions already exists or could occur without methyl bromide fumigation: moderate to severe red legged ham beetle, cheese/ham skipper, dermestid beetle or ham mite infestation. with a reasonable expectation that one or more of the following limiting critical conditions already exists or could occur without methyl bromide fumigation: moderate to severe red legged ham beetle, cheese/ham skipper, dermestid beetle or ham mite infestation. with a reasonable expectation that one or more of the following limiting critical conditions already exists or could occur without methyl bromide fumigation: moderate to severe red legged ham beetle, cheese/ham skipper, dermestid beetle or ham mite infestation.

[71 FR 6006, Feb. 6, 2006]

Subpart B—Servicing of Motor Vehicle Air Conditioners

SOURCE: 57 FR 31261, July 14, 1992, unless otherwise noted.

§ 82.30 Purpose and scope.

(a) The purpose of the regulations in this subpart B is to implement section

609 of the Clean Air Act, as amended (Act) regarding the servicing of motor vehicle air conditioners (MVACs), and to implement section 608 of the Act regarding certain servicing, maintenance, repair and disposal of air conditioners in MVACs and MVAC-like appliances (as that term is defined in 40 CFR 82.152).

(b) These regulations apply to any person performing service on a motor