

**DEPARTMENT OF WAR  
ODS & HFC RESERVE**

**CUSTOMER TURN-IN  
PROCEDURES  
for  
Ozone Depleting Substances (ODS) and  
Hydrofluorocarbons (HFCs)**

## PREFACE

The Defense Logistics Agency (DLA) manages Ozone Depleting Substances (ODS) and specific Mission Critical Military End Users (MCMEU) Hydrofluorocarbons (HFCs) to ensure availability of mission critical supplies. The DLA Aviation ODS & HFC Reserve provides central management for the receipt and storage of select ODS and HFCs. DLA Distribution Richmond (DDRV) is the primary storage site for the ODS & HFC Repository.

It is required that your Military Service or Defense Agency turn in excess inventory of the following ODS and HFC products to the Reserve:

### ODS

CFC's: R11, R12, R114, R500 and R502

HCFC: R22

Halon: 1202, 1211, 1301 and 2402

Precision Cleaning Solvents: 1,1,1 and 113

**\*Solvents must be unused and in unopened/sealed original containers**

### HFCs

R125, R134a, R227ea, R236fa, R404a, R407a, R407c, R410a, R417a, R438a, and R507a

The Reserve accepts both new and used select ODS and HFCs in a relatively pure state (i.e.: not as a part of other products). This includes chemicals gained under the Federal Supply Classes (FSC) 6830 or from a commercial source.

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**Contact the ODS & HFC Reserve for questions or concerns:**

|                        |                 |                |                    |
|------------------------|-----------------|----------------|--------------------|
| Requisition Assistance | Orlando Gandy   | (804) 279-2892 | DSN (312) 695-2892 |
|                        | Scott Johnson   | (804) 279-6451 | DSN (312) 695-6451 |
| Turn In and Technical  | Jeffrey Bickham | (804) 279-3921 | DSN (312) 695-3921 |
|                        | Mike Palya      | (804) 279-4525 | DSN (312) 695-4525 |
| Procedural and Policy  | Philip Nott     | (804) 279-5004 | DSN (312) 695-5004 |

The email address is [avnodshfreserve@dla.mil](mailto:avnodshfreserve@dla.mil).

Philip Nott  
Program Manager  
DoW ODS & HFC Reserve

**Section 1**  
**ODS and HFC CHEMICALS**

The following products are available for turn in to the ODS & HFC Reserve:

| <b>TYPE</b> | <b>PRODUCT</b> | <b>CHEMICAL NAME</b>  | <b>CHEMICAL FORMULA</b>   |
|-------------|----------------|---|---|
| ODS         | R11            | Trichlorofluoromethane  | CCl <sub>3</sub> F  |
| ODS         | R12            | Dichlorodifluoromethane   | CCl <sub>2</sub> F <sub>2</sub>   |
| ODS         | R22            | Chlorodifluoromethane   | CHClF <sub>2</sub>  |
| ODS         | R114           | Dichlorotetrafluoroethane   | C <sub>2</sub> Cl <sub>2</sub> F <sub>4</sub>   |
| ODS         | R500           | CFC 12 and HFC 152a   | CCl <sub>2</sub> F <sub>2</sub> ; C <sub>2</sub> H <sub>4</sub> F <sub>2</sub>  |
| ODS         | R502           | CFC 115 and HCFC 22   | C <sub>2</sub> ClF <sub>5</sub> ; CHClF <sub>2</sub>  |
| ODS         | Halon 1202     | Dibromodifluoromethane  | CBr <sub>2</sub> F <sub>2</sub>   |
| ODS         | Halon 1211     | Bromochlorodifluoromethane  | CBrClF <sub>2</sub>   |
| ODS         | Halon 1301     | Bromotrifluoromethane   | CBrF <sub>3</sub>   |
| ODS         | Halon 2402     | Dibromotetrafluoroethane  | C <sub>2</sub> Br <sub>2</sub> F <sub>4</sub>   |
| ODS         | 1,1,1          | Trichloroethane   | C <sub>2</sub> H <sub>3</sub> Cl <sub>3</sub>   |
| ODS         | 113            | Trichlorotrifluoroethane (Type I and II)                                      | CClF <sub>2</sub> CCl <sub>2</sub> F  |
| HFC         | R125           | Pentafluoroethane   | CF <sub>3</sub> CHF <sub>2</sub>  |
| HFC         | R134a          | Tetrafluoroethane   | 1,1,1,2   |
| HFC         | R227ea         | Heptafluoropropane  | 1,1,1,2,3,3,3   |
| HFC         | R236fa         | Hexafluoropropane   | 1,1,1,3,3,3   |
| HFC         | R404a          | Pentafluoroethane and Trifluoroethane   | CHF <sub>2</sub> CF <sub>3</sub> ;<br>CH <sub>3</sub> CF <sub>3</sub>   |
| HFC         | R407a          | Difluoromethane, Pentafluoroethane, and Tetrafluoroethane                     | CHF <sub>2</sub> CF <sub>3</sub> ;<br>CH <sub>3</sub> CF <sub>3</sub> ;<br>CH <sub>2</sub> FCF <sub>3</sub>   |
| HFC         | R407c          | Difluoromethane, Pentafluoroethane, and Tetrafluoroethane                     | CH <sub>2</sub> F <sub>2</sub> ; CF <sub>3</sub> CHF <sub>2</sub> ;<br>CH <sub>2</sub> FCF <sub>3</sub>   |
| HFC         | R410a          | Difluoromethane and Pentafluoroethane   | CHF <sub>2</sub> CF <sub>3</sub> ;<br>CHF <sub>2</sub> CF <sub>3</sub>  |
| HFC         | R417a          | Tetrafluoroethane, Pentafluoroethane, and Isopentane                          | 1,1,1,2; CF <sub>3</sub> CHF <sub>2</sub> ;<br>C <sub>4</sub> H <sub>10</sub>   |
| HFC         | R438a          | Difluoromethane, Pentafluoroethane, Tetrafluoroethane, Butane, and Isopentane | CHF <sub>2</sub> CF <sub>3</sub> ;<br>CHF <sub>2</sub> CF <sub>3</sub> ;<br>1,1,1,2; C <sub>4</sub> H <sub>10</sub> ;<br>and C <sub>5</sub> H <sub>12</sub> |
| HFC         | R507a          | Pentafluoroethane and Trifluoroethane   | CF <sub>3</sub> CHF <sub>2</sub> ; C <sub>2</sub> H <sub>3</sub> F <sub>3</sub>   |

## Section 2 GENERAL ODS AND HFC TURN IN INFORMATION

- I. Procedures
  - A. DLA Distribution Richmond VA (DDRV) is the primary turn in site for the DoW ODS & HFC Reserve. Section 4 explains supplemental collection sites in Pearl Harbor HI and San Diego CA (Navy only), plus Yokosuka Japan for all Japanese bases. These sites are not mini-Reserves, only alternate collection sites. Follow all instructions in Section 2 and any specific instructions in Section 4 for each collection site.
  - B. Preauthorization is not required to turn in approved ODS or HFC products to the ODS & HFC Reserve; however, collection sites may have specific requirements.
  - C. The ODS & HFC Reserve accepts approved ODS and HFC products listed in Section 1 in all types of containers not listed in Section D, including cylinders, fire extinguishers, drums, spheres, and canisters.  
**Exception: Return repairable aircraft specific canisters through the airframe maintenance channels.**
  - D. The following items are not a part of the ODS & HFC Reserve:
    1. Empty fire extinguishers (valves removed)
    2. Empty commercial containers
    3. Aerosol cans with ODS or HFC chemicals
    4. Dry Chemicals

Contact your local Property Disposal Office for guidance on discarding these items.
  - E. Label or tag all pallets or containers returned to the Reserve as follows:
    1. DoW Activity Address Code (DoDAAC) of shipper
    2. Shipping activity street address with POC and phone number
    3. NSN of ODS or HFC containers (see Section 5)
    4. Product Type (i.e., R114, Halon 1301, R236fa)
    5. Quantity of cylinders
    6. Include a DD1149 or DD1348-1 with the cylinder(s), using the appropriate turn in NSN(s) as listed in Section 5
  - F. All pallets and containers must comply with Code of Federal Regulations (CFR) 49.173.

- G. Some fire suppression cylinders and canisters contain electrical charges or initiators known as squibs. Remove all squibs before shipping. Safety caps must cover exposed mechanisms and discharge ports on cylinders. Otherwise, dangerous safety situations could arise during the shipping, receiving, or storage process. Local area fire protection equipment companies can provide safety services.
- H. Contact the ODS & HFC Reserve Program Office at (804) 279-4525 (DSN 695-4525) or email [avnodshfcreserve@dla.mil](mailto:avnodshfcreserve@dla.mil) for further guidance.
- I. Monetary credit is not given for turned in ODS or HFC cylinders. The service (Air Force, Army, Coast Guard, Marines, Navy) receives ownership credit for the pounds of ODS or HFC returned to the ODS & HFC Reserve.
- J. Shipping procedures:
1. Units with leaking containers will transfer the ODS or HFC into proper storage containers before shipment. Call an ODS & HFC Reserve contacts listed in Section 6 for guidance related to leaking cylinders.
  2. Band cylinders together in an upright position, using a wooden collar on wooden pallets using metal or steel banding material or secured in a wooden crate.
  3. Halon fire extinguishers and system cylinders will have safety pins installed where applicable and secured to prevent accidental release. Install safety caps on all cylinders.
  4. Deliveries must be on cargo vehicles that allow ground level forklift off-loading (removable side rails, etc.). Off-island shipments can be sent by routine commercial or military means. Containers will not be unloaded by hand.
- K. The government cylinders used for recovering ODS and HFC refrigerants are orange with yellow tops while halon cylinders are red with yellow tops. They also have dual port valves to distinguish them from single port valves which are standard on spec gas cylinders (solid orange or solid red). Dual port spec gas CFC cylinders are only available for Navy shipboard applications. Turn in all empty recovery and spec gas cylinders to the Reserve. Refurbished spec gas cylinders are refilled with spec product for future requisitions. Do not recover ODS or HFCs into a spec cylinder to avoid contamination. There are exceptions for Navy shipboard applications for recovering product into spec gas cylinders. Exceptions require preapproval from the ODS & HFC Program Office.

- L. Reusable cylinders are accepted and should be sent to the Reserve. Pictured are standard 122 pound 10"x49" and 50-pound recovery cylinders that are available commercially and can be used to recover residual vapor from the one-time use disposable cylinders.



- M. Empty one-time use disposable cylinders (as pictured) should not be sent to the Reserve. EPA 608 states when a cylinder is empty to remove the remaining vapor into a reusable recover cylinder, drill a hole in cylinder, and recycle in a metal bin. One-time use disposable cylinders that have not been used and do contain product should be shipped to the Reserve.



- N. **The ODS & HFC Reserve no longer automatically accepts mixed reserve products.** You must contact the ODS & HFC Reserve on a case-by-case basis with information on what type of products are mixed. All contents need to be clearly identified with all chemical components (i.e., R236fa & R134a). If cylinders contain gases that cannot be identified or are not managed by the ODS & HFC Reserve, they need to be disposed of by other means.
- O. Government recovery cylinders are available at virtually no charge through the ODS & HFC Reserve. Use the Military Standard Requisition and Issue Procedure (MILSTRIP) to order ODS or HFC cylinders. FEDMALL supply system is the preferred entry method for a requisition (sales order). FEDMALL is accessed through the PIEE (Procurement Integrated Enterprise Environment) website, <https://cac.piee.eb.mil/xhtml/auth/home/home.xhtml>. The DLA Customer Interaction Center (DLA CIC) is available 24 hours a day at (877) 352-2255 (877-DLA-CALL), or by email at [dlacontact@dla.mil](mailto:dlacontact@dla.mil). DLA CIC helps with requisition entry, MILSTRIP questions, and requisition status. A copy of the ODS & HFC Requisition Procedures are available at <https://www.dla.mil/Aviation/Offers/ODS-Reserve/>.
- P. CFC Solvents – 113 and 1,1,1 Trichloroethane must be in their original sealed and unopened containers when turned in.

## II. Transportation Guidance

### A. When shipping ODS or HFCs, refer to the following regulations:

1. MIL-STD 129L, Military Standard Marking for Shipment and Storage
2. DLAR 4145.25, Storage and Handling of Compressed Gases and Liquids in Cylinders, and of Cylinder or the following applicable Service regulation:
  - a. AR-700-68
  - b. NAVSUPINST 4440.128C
  - c. MCO 10330.2C
  - d. AFR67-12
3. Code of Federal Regulations 49.173 (particularly 173.301), Requirements for the Shipment of Compressed Gas Cylinders
4. Properly mark, palletize, and band all material.

### B. Forward Turn ins to the following address:

SW0400  
DLA DISTRIBUTION RICHMOND VA  
ODS & HFC Cylinder Operations, Open Shed 6  
6090 Strathmore Road  
Richmond, VA 23237

**Based on the June 5, 2026 Under Secretary of War, Acquisition and Sustainment, Memorandum USA000999-26\_USW (see attachment below), DLA no longer provides funding for the transportation of products turned in to the ODS&HFC Reserve.**



USA000999-26\_US  
W Signed.pdf

### C. Carrier Information

1. All carriers must make an appointment to make a delivery. Carriers make appointments through the Carrier Appointment System (CAS):  
<https://eta-teams.transport.mil/teams/login>
2. New users must register for the following applications:
  - a. "CAS: Carrier Appointment System" to request appointments
  - b. "GFM: Global Freight Management" contains delivery information for specific bases/locations)

3. The ODS & HFC Reserve accepts deliveries from 7:00 AM to 12:00 noon, Monday through Friday, excluding federal holidays. Upload the Bill of Lading (BOL) and other shipping paperwork into CAS when creating the request. Note the chemical names in the Item Description. State the shipment contains ODS and/or HFC products in the Remarks field.
4. Contact the DLA Transportation Office for assistance with appointments:  
[ddrv.dtcidla.mil@dla.mil](mailto:ddrv.dtcidla.mil@dla.mil) or 804-629-1974
5. All drivers seeking access to Defense Supply Center Richmond (DSCR) must present a Real ID-compliant driver's license or identification card, or an alternative ID such as a passport. DLA will no longer accept a state-issued identification that does not meet the Real ID Act of 2005 standards as proof of identity. For more information on the Real ID Act, please visit these sites: [REAL ID | Homeland Security \(dhs.gov\)](#) and [REAL ID FAQs | Homeland Security \(dhs.gov\)](#).
6. Carriers can call the ODS & HFC Warehouses at 937-901-8379 for directions when they arrive at the Depot.

**Section 3**  
**SPECIAL HANDLING PROCEDURES FOR HALON 1301 and HFC-227ea (FM200)**  
**SYSTEM CYLINDERS**

- I. Halon 1301 and HFC-227ea are typically used with built-in fire suppression systems. The cylinders are connected to the system through piping. The fire suppressant is pressurized with nitrogen to enable distribution. The cylinders are usually disconnected and returned directly to the ODS & HFC Reserve. Deactivate all electrical charges or initiators on cylinders and canisters before shipment. Use special care with the valves as they discharge all suppressants in less than 10 seconds when activated. The combination of sensitive valves and high pressure require good safety practices. It is highly recommended to contact a Fire Suppression Systems expert to perform the decommissioning/removal.
  
- II. Instructions for dismantling a Fire Suppression System:
  - Step 1: Deactivate the actuation system first. These are usually electrical or pneumatic. Disconnection from the electrical or pneumatic source is not enough from a safety standpoint. On pneumatic systems, there is often still a small pin exposed that must be covered with a safety cap before handling. Just the slightest touch on this pin could cause full activation of the valve. On electrically activated valves, simple disconnection of the electrical leads to solenoid valves is acceptable. Remove any explosive initiator, if equipped, before starting any other dismantling. This is a very important safety practice because static electricity can cause the explosive to detonate.
  
  - Step 2: Disconnect any discharge piping from the discharge port. Immediately upon disconnection of the piping, install an anti-recoil device (discharge port safety cap). Install safety caps to cover actuation mechanisms and discharge ports to avoid safety situations during the shipping, receiving, or storage process. Application of manufacturer's designed and supplied caps are the proper safety practices. In some cases, the threads are not the same as pipe threads and may not hold under the pressure of release. Drill at least four opposing holes of pipe caps, plugs, or plates if substituted for manufacturer's caps. This will disperse any Halon if the valve inadvertently activates. Anti-recoil devices (safety caps/plugs/plates) must always be in place before handling the cylinders.
  
- III. Adherence with the above safety practices is paramount before removing any cylinders from the mounting position. Once the safety devices are in place, cylinders can be moved with relative safety. However, these are high-pressure compressed gas cylinders and require all the safe handling practices of any other gas cylinder. Protective safety wear is required when deactivating cylinders.

**Section 4**  
**ADDITIONAL SITE-SPECIFIC PROCEDURES**

- I. Procedures for DLA Distribution Sites Outside Richmond
  - A. Turn In of ODS or HFC products at DLA sites alternative to Richmond will follow all procedures listed in Section 2.
  - B. Transportation Guidance
    - 1. When transporting compressed gas cylinders with ODS or HFC products, the following guidelines apply to military and contracted carriers:
      - a. OCONUS shipments should follow MILITARY-TO-MILITARY guidelines to avoid Host Nation import/export regulations and restrictions.
      - b. Shipments originating from overseas and transported by sea must adhere to the International Maritime Dangerous Goods (IMDG) Code.
- II. Procedures for all U.S. Bases within the European Union and United Kingdom
  - A. DLA Distribution in Richmond, VA is the primary turn in site for the ODS & HFC Reserve. Ship all HFCs directly from the Using Unit to the ODS & HFC Reserve. Use the Defense Transportation System established in the Theater Logistics Procedures.
  - B. When transporting compressed gas cylinders with ODS or HFC, the following guidelines apply to military and contracted carriers:
    - 1. Military carriers must follow USAREUR Regulation 55 and USAFE Regulation 75. Carriers must also comply with the European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR) and the equivalent in Germany (GGVS).
    - 2. Shipments using U.S. military personnel and vehicles require driver training, driver certification, and vehicle inspection. Other requirements may be mandated by regulation.
    - 3. Shipments to Ports of Embarkation must follow exporting and importing country requirements.

III. Procedures for Collection Site at DLA Distribution Pearl Harbor (DDPH)

- A. Forward any turn-ins originating in the Pacific region to the following consolidation point address:

DLA Distribution Pearl Harbor  
Cylinder Operations Bldg. 1762  
840 Vincennes Avenue  
Pearl Harbor, Hawaii 96860-4544  
(808) 473-8000 Ext 5510

POCs:

Sombor Sok (Mrs. SAM)  
HAZMAT Pack Supervisor  
DLA Distribution Pearl Harbor Bldg. 1762  
Work: (808) 786-2173  
Work cell: (808) 927-6266  
Email: sombor.sok@dla.mil

LS2 (SW/AW) Ebron, Marquis  
DLA Distribution Pearl Harbor  
Joint Base Pearl Harbor-Hickam  
2000 Gaffney St. Bldg. 1762  
JBPHH, HI 96808  
Cell: (808) 452 5262

- B. DLA accepts deliveries Monday through Friday between 0800 and 1400, except holidays. Advanced notification is not needed for deliveries of four (4) pallets or less. For quantities greater than 4 pallets, a delivery schedule should be coordinated in advance with DDPH. Coordinate any other special needs with DDPH.
- C. Deliveries must be on cargo vehicles that allow ground level forklift off-loading (removable side rails, etc.). Off-island shipments can be shipped via routine commercial or military means. Containers will not be unloaded by hand.

IV. Procedures for Collection Site at DLA Distribution Yokosuka Japan (DDYJ)

A. Turn-ins should be forwarded to the following consolidation point address:

DLA Distribution Yokosuka, Japan  
SW3142  
DDYJ Receiving (KA)  
Bldg. 5010  
Yokosuka, Japan

POC: Romualdo Dulce  
Telephone VOIP: DSN: 325-226-2458  
COMM 011-81-042-800-0181  
Email: [romualdo.dulce@dla.mil](mailto:romualdo.dulce@dla.mil)

B. Deliveries will be accepted Monday through Friday between 0800 and 1400, except holidays. Coordinate delivery in advance and any other special needs with the DDYJ POC listed above.

V. Procedures for Collection Site at DLA Distribution San Diego, California (DDDC), **Restricted to Navy Only**

A. Forward Turn-ins originating in the Pacific region to the following consolidation point address:

DLA Distribution San Diego  
3581 Cummings Road, Bldg 3322  
San Diego, CA 92136-3581

Email addresses (preferred contact method):  
[melissa.luna.ctr@dla.mil](mailto:melissa.luna.ctr@dla.mil)  
[miguel.rico.ctr@dla.mil](mailto:miguel.rico.ctr@dla.mil)  
Telephone (619) 512-0234

B. Deliveries will be accepted Monday through Friday between 0600 and 1300, except holidays. Advance notice of deliveries via email is required on all turn-ins. Coordinate any other special need with a DDDC contact above.

**Section 5A  
TURN-IN HALON NSN's**

**NSN's based off weight of product: (Total Weight – Tare Weight = Product Weight)**

| <b>Type</b> | <b>NSN</b>          | <b>Product</b> | <b>Description</b> |
|-------------|---------------------|----------------|--------------------|
| Halon 1211  | 6830-01-376-8013    | 1-5            |                    |
|             | 6830-01-376-8014    | 6-10           |                    |
|             | 6830-01-376-8015    | 11-20          |                    |
|             | 6830-01-376-8016    | 21-60          |                    |
|             | 6830-01-376-8017    | 61-125         |                    |
|             | 6830-01-356-1209    | 126-200        |                    |
|             | 6830-01-376-8018    | 201-340        |                    |
|             | 6830-01-356-1211    | 341-1500       |                    |
|             | 8120-00-337-2899*   |                | 200 lb. Empty Spec |
|             | 8120-01-396-2165*   |                | 1000 lb. Empty     |
|             | 8120-01-356-1248**  |                | 100 lb. Empty      |
|             | 8120-01-356-1249**  |                | 1000 lb. Empty     |
| Halon 1301  | 6830-01-376-8394    | 1-5            |                    |
|             | 6830-01-376-8395    | 6-10           |                    |
|             | 6830-01-376-8396    | 11-20          |                    |
|             | 6830-01-376-8397    | 21-70          |                    |
|             | 6830-01-376-8398    | 71-100         |                    |
|             | 6830-01-371-0501    | 101-117        |                    |
|             | 6830-01-376-8399    | 118-125        |                    |
|             | 6830-01-356-9752    | 126-150        |                    |
|             | 6830-01-376-8400    | 151-200        |                    |
|             | 6830-01-376-8401    | 201-260        |                    |
|             | 6830-01-376-8402    | 261-350        |                    |
|             | 6830-01-376-8403    | 351-530        |                    |
|             | 6830-01-376-8404    | 531-600        |                    |
|             | 6830-01-356-5958    | 601-1240       |                    |
|             | 8120-00-531-8193*   |                | 137 & 150 lb.      |
|             | 8120-01-356-5961*   |                | 1123 & 1240 lb.    |
|             | 8120-01-371-0533*** |                | 117 lb. Empty      |
|             | 8120-01-356-5963**  |                | 122 lb. Empty      |
|             | 8120-01-356-5962**  |                | 1000 lb. Empty     |
| Halon 1202  | 6830-01-356-1780    | 160            |                    |
|             | 6830-01-447-3632    | 2000           |                    |
|             | 8120-01-339-6277*   |                | 160 lb. Empty Spec |
|             | 8120-01-371-0532*   |                | 2000 lb. Empty     |
|             | 8120-01-356-1781**  |                | 122 lb. Empty      |
|             | 8120-01-447-3636**  |                | 1000 lb. Empty     |
| Halon 2402  | 6830-01-469-9138    | 122            |                    |
|             | 6830-01-469-9135    | 1000           |                    |
|             | 8120-01-469-2550**  |                | 122 lb. Empty      |
|             | 8120-01-469-2774**  |                | 1000 lb. Empty     |

\*Spec cylinders are solid orange; \*\*Recovery cylinders have orange body & yellow top \*\*\*Denotes HIGH-PRESSURE CYLINDER for recovering Halon 1301 from nitrogen-charged fire suppression cylinders. Maximum pressure is 2265 psi.

**Section 5B**  
**ODS REFRIGERANT NSN TABLES**

**To determine the correct NSN for ODS Refrigerants, select the NSN based on cylinder capacity.**

Refrigerant cylinders with product in them should use the NSN with the 6830 FSC.

Empty cylinders should use the NSN with the 8120 FSC:

Spec cylinders are solid orange

Recovery cylinders have an orange body and yellow top

| Type | Size          | Filled Cylinder  | Empty Spec<br>Solid Orange | Empty Recovery<br>Orange w/Yellow<br>Top |
|------|---------------|------------------|----------------------------|--|
| R11  |               |                  |                            |  |
|      | 59            | 6830-01-355-9754 |                            | 8120-01-356-5960                         |
|      | 100           | 6830-01-368-4847 |                            |  |
|      | 170           | 6830-01-355-9756 | 8120-01-355-9761           | 8120-01-356-9756                         |
|      | 200           | 6830-01-367-9554 |                            |  |
|      | 650           | 6830-01-367-9555 |                            |  |
|      | 1400          | 6830-01-355-9758 | 8120-01-531-2122           | 8120-01-355-9763                         |
| R12  |               |                  |                            |  |
|      | 45            | 6830-01-355-4013 | 8120-01-337-1816           | 8120-01-355-4017                         |
|      | 145           | 6830-01-355-6648 | 8120-01-337-6242           | 8120-01-355-4018                         |
|      | 1190          | 6830-01-355-4015 | 8120-01-355-4016           | 8120-01-355-4019                         |
| R22  |               |                  |                            |  |
|      | 44            | 6830-01-357-9131 | 8120-01-567-8524           | 8120-01-357-9140                         |
|      | 128           | 6830-01-357-9129 | 8120-01-567-8639           | 8120-01-357-9139                         |
|      | 1050          | 6830-01-357-9133 | 8120-01-567-9029           | 8120-01-357-9141                         |
| R114 |               |                  |                            |  |
|      | 57            | 6830-01-356-1203 | 8120-01-354-9400           | 8120-01-356-1245                         |
|      | 165 (12"x36") | 6830-01-356-1205 | 8120-01-337-6236           | 8120-01-356-1246                         |
|      | 165 (10"x49") | 6830-01-377-1807 | 8120-00-063-3983           | 8120-01-377-2300                         |
|      | 1360          | 6830-01-356-1207 | 8120-01-356-1244           | 8120-01-356-1247                         |
| R500 |               |                  |                            |  |
|      | 43            | 6830-01-357-7650 | 8120-01-357-6773           | 8120-01-357-6774                         |
|      | 127           | 6830-01-358-5123 | 8120-01-357-6772           | 8120-01-357-7656                         |
|      | 1045          | 6830-01-357-7654 | 8120-01-357-9137           | 8120-01-357-7657                         |
| R502 |               |                  |                            |  |
|      | 44            | 6830-01-357-6726 | 8120-01-357-7655           | 8120-01-357-6770                         |
|      | 128           | 6830-01-357-6727 | 8120-01-337-6239           | 8120-01-357-6771                         |
|      | 1050          | 6830-01-357-6905 | 8120-01-357-6907           | 8120-01-357-6769                         |

**Section 5C**  
**HFC REFRIGERANT NSN TABLES**

Turn-In NSN is based on product, cylinder size (capacity) and actual product weight in the cylinder:

Total weight – empty cylinder tare weight = product weight

Example: 150# cylinder of R227ea with 75 pounds of product = 6830-01-725-2998

| Type   | Description        | Cylinder Size | Product Weight | Turn In NSN      |                  |
|--------|--------------------|---------------|----------------|------------------|------------------|
| R125   | Pentafluoroethane  | 42            | 0 - 15         | 6830-01-737-9661 |                  |
|        |                    |               | 16 - 30        | 6830-01-737-9663 |                  |
|        |                    |               | 31 - up        | 6830-01-737-9666 |                  |
|        |                    | 122           | 0 - 50         | 6830-01-725-2882 |                  |
|        |                    |               | 51 - 100       | 6830-01-725-2943 |                  |
|        |                    |               | 101 - up       | 6830-01-725-2939 |                  |
|        |                    |               | 1000           | 0 - 300          | 6830-01-738-6997 |
|        |                    |               |                | 301 - 600        | 6830-01-738-6999 |
|        |                    |               | 601-900        | 6830-01-725-2938 |                  |
|        |                    |               | 901 - up       | 6830-01-738-6968 |                  |
| R134a  | Tetrafluoroethane  | 42            | 0 - 15         | 6830-01-725-2946 |                  |
|        |                    |               | 16 - 30        | 6830-01-725-2949 |                  |
|        |                    |               | 31 - up        | 6830-01-725-2947 |                  |
|        |                    | 122           | 0 - 50         | 6830-01-725-2950 |                  |
|        |                    |               | 51 - 100       | 6830-01-725-2948 |                  |
|        |                    |               | 101 - up       | 6830-01-725-2951 |                  |
|        |                    |               | 1000           | 0 - 300          | 6830-01-738-6960 |
|        |                    |               |                | 301 - 600        | 6830-01-738-6957 |
|        |                    |               | 601 - 900      | 6830-01-725-2953 |                  |
|        |                    |               | 901 - up       | 6830-01-738-6951 |                  |
| R227ea | Heptafluoropropane | 42            | 0 - 15         | 6830-01-729-2567 |                  |
|        |                    |               | 16 - 30        | 6830-01-729-2572 |                  |
|        |                    |               | 31 - up        | 6830-01-729-2566 |                  |
|        |                    | 122           | 0 - 50         | 6830-01-725-2960 |                  |
|        |                    |               | 51 - 100       | 6830-01-725-2998 |                  |
|        |                    |               | 101 - up       | 6830-01-725-3007 |                  |
|        |                    |               | 1000           | 0 - 300          | 6830-01-725-3000 |
|        |                    |               |                | 301 - 600        | 6830-01-725-3001 |
|        |                    |               | 601 - 900      | 6830-01-725-3003 |                  |
|        |                    |               | 901 - up       | 6830-01-725-3009 |                  |

**Section 5C**  
**HFC REFRIGERANT NSN TABLES**  
**(Continued)**

|        |                               |          |                  |                  |
|--------|-------------------------------|----------|------------------|------------------|
| R236fa | Hexafluoropropane             | 42       | 0 - 15           | 6830-01-738-6944 |
|        |                               |          | 16 - 30          | 6830-01-738-6941 |
|        |                               |          | 31 - up          | 6830-01-738-6919 |
|        |                               | 122      | 0 - 50           | 6830-01-725-3015 |
|        |                               |          | 51 - 100         | 6830-01-725-3014 |
|        |                               |          | 101 - up         | 6830-01-725-3018 |
|        |                               | 1000     | 0 - 300          | 6830-01-737-9694 |
|        |                               |          | 301 - 600        | 6830-01-737-9701 |
|        |                               |          | 601-900          | 6830-01-725-3019 |
|        |                               | 901 - up | 6830-01-737-9972 |                  |
| R404a  | Mixture of R125, R134a, R143a | 42       | 0 - 15           | 6830-01-725-3100 |
|        |                               |          | 16 - 30          | 6830-01-725-3099 |
|        |                               |          | 31 - up          | 6830-01-738-6913 |
|        |                               | 122      | 0 - 50           | 6830-01-725-3095 |
|        |                               |          | 51 - 100         | 6830-01-725-3097 |
|        |                               |          | 101 - up         | 6830-01-738-6910 |
|        |                               | 1000     | 0 - 300          | 6830-01-738-6907 |
|        |                               |          | 301 - 600        | 6830-01-738-6904 |
|        |                               |          | 601-900          | 6830-01-725-3098 |
|        |                               | 901 - up | 6830-01-738-6897 |                  |
| R407a  | Mixture of R134a, R125, R32   | 42       | 0 - 10           | 6830-01-725-3102 |
|        |                               |          | 11 - 20          | 6830-01-725-3105 |
|        |                               |          | 21 - up          | 6830-01-725-3106 |
|        |                               | 122      | 0 - 50           | 6830-01-738-6893 |
|        |                               |          | 51 - 100         | 6830-01-738-6649 |
|        |                               |          | 101 - up         | 6830-01-738-6641 |
|        |                               | 1000     | 0 - 300          | 6830-01-738-6634 |
|        |                               |          | 301 - 600        | 6830-01-738-6628 |
|        |                               |          | 601-900          | 6830-01-725-3113 |
|        |                               | 901 - up | 6830-01-738-6621 |                  |
| R407c  | Mixture of R32, R125, R134a   | 42       | 0 - 10           | 6830-01-725-3114 |
|        |                               |          | 11 - 20          | 6830-01-725-3115 |
|        |                               |          | 21 - up          | 6830-01-725-3124 |
|        |                               | 122      | 0 - 50           | 6830-01-725-3127 |
|        |                               |          | 51 - 100         | 6830-01-725-3117 |
|        |                               |          | 101 - up         | 6830-01-725-3119 |
|        |                               | 1000     | 0 - 300          | 6830-01-738-6616 |
|        |                               |          | 301 - 600        | 6830-01-738-6612 |
|        |                               |          | 601-900          | 6830-01-725-3121 |
|        |                               | 901 - up | 6830-01-738-6609 |                  |

**Section 5C**  
**HFC REFRIGERANT NSN TABLES**  
(Continued)

| Type  | Description                               | Cylinder Size | Product Weight | Turn In NSN      |
|-------|---|---------------|----------------|------------------|
| R410a | Mixture of R32, R125                      | 42            | 0 - 10         | 6830-01-725-3132 |
|       |   |               | 11 - 20        | 6830-01-725-3133 |
|       |   |               | 21 - up        | 6830-01-725-3134 |
|       |   | 122           | 0 - 50         | 6830-01-737-9702 |
|       |   |               | 51 - 100       | 6830-01-737-9705 |
|       |   |               | 101 - up       | 6830-01-737-9973 |
|       |   | 1000          | 0 - 300        | 6830-01-738-6606 |
|       |   |               | 301 - 600      | 6830-01-738-6603 |
|       |   |               | 601-900        | 6830-01-725-3135 |
|       |   |               | 901 - up       | 6830-01-738-6600 |
| R417a | Mixture of R134a, R125, R600              | 42            | 0 - 15         | 6830-01-729-2578 |
|       |   |               | 16 - 30        | 6830-01-729-2591 |
|       |   |               | 31 - up        | 6830-01-729-2594 |
|       |   | 122           | 0 - 50         | 6830-01-738-6581 |
|       |   |               | 51 - 100       | 6830-01-738-6578 |
|       |   |               | 101 - up       | 6830-01-738-6572 |
|       |   | 1000          | 0 - 300        | 6830-01-738-6567 |
|       |   |               | 301 - 600      | 6830-01-738-6562 |
|       |   |               | 601-900        | 6830-01-729-2602 |
|       |   |               | 901 - up       | 6830-01-738-6559 |
| R438a | Mixture of R32, R125, R134a, R600a, R601a | 42            | 0 - 15         | 6830-01-725-3139 |
|       |   |               | 16 - 30        | 6830-01-725-3140 |
|       |   |               | 31 - up        | 6830-01-725-3141 |
|       |   | 122           | 0 - 50         | 6830-01-725-3143 |
|       |   |               | 51 - 100       | 6830-01-725-3145 |
|       |   |               | 101 - up       | 6830-01-725-3148 |
|       |   | 1000          | 0 - 300        | 6830-01-738-6548 |
|       |   |               | 301 - 600      | 6830-01-738-6543 |
|       |   |               | 601-900        | 6830-01-725-3151 |
|       |   |               | 901 - up       | 6830-01-738-6525 |
| R507a | Mixture of R125 and R143a                 | 1000          | 0 - 300        | 6830-01-737-9709 |
|       |   |               | 301 - 600      | 6830-01-737-9719 |
|       |   |               | 601-900        | 6830-01-737-9734 |
|       |   |               | 901 - up       | 6830-01-737-9982 |

**Section 5D**  
**PRECISION CLEANING SOLVENTS NSN TABLES**

CFC/Solvent - 113 (Type I & II) and 1,1,1 Trichloroethane (FSCs 6850 and 6810) can also be turned-in to the Reserve provided they have never been used and the containers in which the chemicals reside have never been opened or unsealed.

| <b>Type</b>            | <b>NSN</b>       | <b>Cylinder Capacity</b> |
|------------------------|------------------|--------------------------|
| Cleaning Solvent 1,1,1 | 6810-01-424-8538 | 6 oz                     |
|                        | 6810-01-424-9662 | 1 pint                   |
|                        | 6810-01-424-9665 | 1 quart                  |
|                        | 6810-01-424-8539 | 1 gal / 12 lbs.          |
|                        | 6810-01-424-9674 | 5 gal / 60 lbs.          |
|                        | 6810-01-424-9673 | 55gal / 660 lbs.         |
| Cleaning Solvent 113   | 6850-01-424-8532 | 6 oz                     |
|                        | 6850-01-424-8533 | 1 pint                   |
|                        | 6850-01-424-8540 | 1 quart                  |
|                        | 6850-01-424-8531 | 1 gal / 11 lbs.          |
|                        | 6850-01-424-8535 | 100 lbs.                 |
|                        | 6850-01-424-8536 | 200 lbs.                 |
|                        | 6850-01-424-8534 | 5 gal / 65 lbs.          |
|                        | 6850-01-424-8537 | 55 gal / 715 lbs.        |

**Section 6  
POINTS OF CONTACT**

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