## DEPARTMENT OF DEFENSE 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 of the following ODS and HFC products to the Reserve:

#### <u>ODS</u>

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** 

<u>HFCs</u>

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.

Section	Description		
1	ODS & HFC Chemicals		
2	Turn ir	n procedures for select ODS and HFC products	5
3		al Handling Procedures for Halon 1301 and HFC 227ea n Cylinders	9
4	Ado	ditional Site-Specific Procedures for DLA Distribution Sites Outside Richmond	
	4,II	European Union and the United Kingdom	10
	4,III Pearl Harbor, Hawaii		
	<b>4,IV</b> Yokosuka, Japan		
	4,V San Diego, California (Navy Only)		
5	NSN'S specifically assigned to the identify HFCs turned in to the ODS & HFC Reserve		
	5A Halon Fire Suppression		13
	5B ODS Refrigerants		14
	5C HFC Refrigerants		15
	5D	Precision Cleaning Solvents	16
6	DoD Services and Coast Guard POC's		

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

Turn In and Technical	Orlando Gandy	(804) 279-2892	DSN (312) 695-2892
	Scott Johnson	(804) 279-6451	DSN (312) 695-6451
	Mike Palya	(804) 279-4525	DSN (312) 695-4525
Procedural and Policy	Brian Howard	(804) 279-5202	DSN (312) 695-5202
-	Phil Nott	(804) 279-5004	DSN (312) 695-5004

The email address is avnodshfcreserve@dla.mil.

Brian Howard Program Manager DoD ODS & HFC Reserve

## Section 1 ODS and HFC CHEMICALS

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

TYPE	PRODUCT	CHEMICAL NAME	CHEMICAL FORMULA
ODS	R11	Trichlorofluoromethane	CCI <sub>3</sub> F
ODS	R12	Dichlorodifluoromethane	CCI <sub>2</sub> F <sub>2</sub>
ODS	R22	Chlorodifluoromethane	CHCIF <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	CCI <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> CIF <sub>5</sub> ; CHCIF <sub>2</sub>
ODS	Halon 1202	Dibromodifluoromethane	CBr <sub>2</sub> F <sub>2</sub>
ODS	Halon 1211	Bromochlorodifluoromethane	CBrCIF <sub>2</sub>
ODS	Halon 1301	Bromotrifluoromethane	CBrF <sub>3</sub>
ODS	Halon 2402	Dibromotetrafluoroethane	$C_2Br_2F_4$
ODS	1,1,1	Trichloroethane	C <sub>2</sub> H <sub>3</sub> Cl <sub>3</sub>
ODS	113	Trichlorotrifluoroethane (Type I and II)	CCIF <sub>2</sub> CCI <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 Trifluoethane	CHF <sub>2</sub> CF <sub>3</sub> ;
			CH <sub>3</sub> CF <sub>3</sub>
HFC	R407a	Difluoromethane, Pentafluoroethane, and	CHF <sub>2</sub> CF <sub>3</sub> ;
		Tetrafluoroethane	CH3CF3;
			CH2FCF3
HFC	R407c	Difluoromethane, Pentafluoroethane, and	CH <sub>2</sub> F <sub>2</sub> ; CF <sub>3</sub> CHF <sub>2</sub> ;
		Tetrafluoroethane	CH <sub>2</sub> FCF <sub>3</sub>
HFC	R410a	Difluoromethane and Pentafluoroethane	CHF <sub>2</sub> CF <sub>3</sub> ;
			CHF <sub>2</sub> CF <sub>3</sub>
HFC	R417a	Tetrafluoroethane , Pentafluoroethane, and	1,1,1,2; CF <sub>3</sub> CHF <sub>2;</sub>
		Isopentane	C4H10
HFC	R438a	Difluoromethane, Pentafluoroethane,	CHF <sub>2</sub> CF <sub>3</sub> ;
		Tetrafluoroethane, Butane, and Isopentane	CHF2CF3;
			1,1,1,2; C <sub>4</sub> H <sub>10</sub> ;
			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 DoD 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.
- 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. <u>Exception: Return repairable aircraft specific canisters through the</u> <u>airframe maintenance channels.</u>
- 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. DoD Activity Address Code (DoDAAC) of shipper
  - 2. Shipping activity street address with POC and phone number
  - 3. NSN of ODS or HFC container(s) (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 <u>avnodshfcreserve@dla.mil</u> 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:
  - 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 to recovering product into spec gas cylinders. Exceptions require preapproval from the ODS & HFC Program Office.

- L. The ODS & HFC Reserve accepts burned out or mixed reserve products. Mixed cylinders are categorized by the predominate gas, which needs to be a gas managed by the ODS & HFC Reserve. Clearly identify the chemical by defining its components (i.e., R236fa & R134a)
- M. 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, <u>https://cac.piee.eb.mil/xhtml/auth/home/home.xhtml</u>. The DLA Customer Interaction Center (DLA CIC) is available 24 hours a day at (877) 352-2255 (877-DLA-CALL), or by email at <u>dlacontact@dla.mil</u>. DLA CIC helps with requisition entry, MILSTRIP questions, and requisition status. A copy of the ODS & HFC Requisition Procedures are available at <u>https://www.dla.mil/Aviation/Offers/ODS-Reserve/</u>.
- N. 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

- C. Carrier Information
  - 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.
- Contact the DLA Transportation Office for assistance with appointments: <u>ddrv.dtcidla.mil@dla.mil</u> or 804-629-1974
- 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 solely 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: <u>REAL</u> <u>ID | Homeland Security (dhs.gov)</u> and <u>REAL ID FAQs | Homeland</u> <u>Security (dhs.gov)</u>.
- 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 performed over water must follow the International Maritime Dangerous Goods Code (IMDG).
- 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:
    - 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 offloading (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: 315-234-0181 COMM 011-81-042-800-0181 Email: 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): <u>melissa.luna.ctr@dla.mil</u> <u>miguel.rico.ctr@dla.mil</u> 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)

Туре	NSN	Product	Description
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		200 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		1000 lb. Empty
	8120-01-356-1781		160 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	1000	122 lb. Empty
	8120-01-469-2774		1000 lb. Empty
	RE CYLINDER for use who		

\* HIGH-PRESSURE CYLINDER for use when recovering Halon 1301 from nitrogen charged fire suppression system 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

Туре	Size	Filled Cylinder	Empty Spec Solid Orange	Empty Recovery Orange w/Yellow Top
R11				
	59	6830-01-355-9754	8120-01-355-9760	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" x	6830-01-356-1205	8120-01-337-6236	8120-01-356-1246
	165 (10" x	6830-01-377-1807	8120-00-063-3983	8120-01-377-2300
	1350	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

		Cylind	Droduct	
Type	Description	er Size	Product Weight	Turn In NSN
<b>Type</b> R125	Description Pentafluoroethane	125	0 - 50	6830-01-725-2882
TTZ5	Fentaliuoloethalle	125	51 - 100	6830-01-725-2943
			101 - up	6830-01-725-2943
		20.20	101 - up	0030-01-725-2939
R134a	Tetrafluoroethane	20, 30, 43	0 - 15	6830-01-725-2946
			16 - 30	6830-01-725-2949
			30 - up	6830-01-725-2947
		125	0 - 50	6830-01-725-2950
			51 - 100	6830-01-725-2948
			101 - up	6830-01-725-2951
R227ea	Heptaluoropropane	42	0 - 15	6830-01-729-2567
			16 - 30	6830-01-729-2572
			30 - up	6830-01-729-2566
		150	0 - 50	6830-01-725-2960
			51 - 100	6830-01-725-2998
			101 - 150	6830-01-725-3007
		1200	0 - 300	6830-01-725-3000
			301 - 600	6830-01-725-3001
			601 - 900	6830-01-725-3003
			901 - 1200	6830-01-725-3009
R236fa	Hexafluoropropane	150	0 - 50	6830-01-725-3015
			51 - 100	6830-01-725-3014
			101 - 150	6830-01-725-3018
R404a	Mixture of R125, R134a, R143a	24, 33	0 - 15	6830-01-725-3100
			16 - 33	6830-01-725-3099
		93	0 - 50	6830-01-725-3095
			51 - 93	6830-01-725-3097
R407a	Mixture of R134a, R125, R32	25	0 - 10	6830-01-725-3102
			11 - 20	6830-01-725-3105
			21 - 25	6830-01-725-3106
R407c	Mixture of R32, R125, R134a	25	0 - 10	6830-01-725-3114
	, -,	-	11 - 20	6830-01-725-3115
			21 - 25	6830-01-725-3124
		125	0 - 50	6830-01-725-3127
			51 - 100	6830-01-725-3117
		125	101 - 125	6830-01-725-3119

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

Туре	Description	Cylinder Size	Product Weight	Turn In NSN
R410a	Mixture of R32, R125	25	0 - 10	6830-01-725-3132
			11 - 20	6830-01-725-3133
			21 - 25	6830-01-725-3134
R417a	Mixture of R134a, R125, R600	30, 42	0 – 15	6830-01-729-2578
			16 – 30	6830-01-729-2591
			30 – up	6830-01-729-2594
R438a	Mixture of R32, R125, R134a, R600a, R601a	24, 43	0 - 15	6830-01-725-3139
			16 - 30	6830-01-725-3140
			30 - 43	6830-01-725-3141
		125	0 - 50	6830-01-725-3143
			51 - 100	6830-01-725-3145
			101 - 125	6830-01-725-3148

## 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.

Туре	NSN	Cylinder Capacity
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 / 640 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	<u>5 gal / 60 lbs.</u>
	6850-01-424-8537	55 gal / 690 lbs.

## Section 6 POINTS OF CONTACT

DEFENSE LOGISTICS AGENCY					
NAME	PHONE	DSN	EMAIL		
ODS & HFC RESERVE			avnodshfcreserve@dla.mil		
BRIAN HOWARD	804-279-5202	312-695-5202	brian.howard@dla.mil		
PHILIP NOTT	804-279-5004	312-695-5004	philip.nott@dla.mil		
ORLANDO GANDY	804-279-2892	312-695-2892	orlando.gandy@dla.mil		
SCOTT JOHNSON	804-279-6451	312-695-6451	daniel.johnson@dla.mil		
MICHAEL PALYA	804-279-4525	312-695-4525	michael.w.palya@dla.mil		

AIR FORCE – HQ USAF					
NAME	PHONE	EMAIL			
KENNETH DORMER	202-494-9585	kenneth.dormer.ctr@us.af.mil			
	ARMY – ASA (A	LT)			
NAME	PHONE	EMAIL			
JOHN HEISE	336-350-1520	johnheise@prospectivetechnology.com			
COA	ST GUARD – H	Q USCG			
NAME	PHONE	EMAIL			
JOHN CEPHAS	202-475-5668	john.w.cephas@uscg.mil			
M	ARINES – HQ U	ISMC			
NAME	PHONE	EMAIL			
JASON PIERCE	571-256-7115	jason.m.pierce@usmc.mil			
NAVY					
NAME	PHONE	EMAIL			
TINA LERKE - NAVSEA	301-547-1857	tina.g.lerke.civ@us.navy.mil			
CINDY CHEN - NAVSEA	301-219-5749	cindy.chen2.civ@us.navy.mil			
MATTHEW ICHNIOWSKI - NAVAIR	240-561-3022	matthew.f.ichniowski.civ@us.navy.mil			
MATT SMITH - MSC	757-469-2680	matthew.b.smith154.civ@us.navy.mil			