

COMSCINST <b>5090.2A</b>	COG CODE <b>N00EP</b>	DATE <b>18 JUN 1998</b>
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**DEPARTMENT OF THE NAVY**  
COMMANDER MILITARY SEALIFT COMMAND  
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COMSCINST 5090.2A  
N00EP  
18 June 1998

COMSC INSTRUCTION 5090.2A

Subj: DISPOSAL OF SOLID WASTE IN THE MARINE ENVIRONMENT

- Ref:
- (a) Annex V of the International Convention for the Prevention of Pollution by Ships, 1973 (MARPOL 73/78)
  - (b) Title II of Public Law 100-220 29 December 1987, The Marine Plastic Pollution Research and Control Act of 1987
  - (c) Code of Federal Regulations, 33 CFR 151 - Vessels Carrying Oil, Noxious Liquid Substances, Garbage, Municipal or Commercial Waste, and Ballast Water
  - (d) National Defense Authorization Act for FY 1997
  - (e) OPNAV P-45-113-93 Afloat Medical Waste Management Guide
  - (f) OPNAVINST 5090.1B, Environmental and Natural Resources Program Manual

- Encl:
- (1) Summary of MARPOL Annex V Requirements
  - (2) Summary of Afloat Medical Waste Management (reference (e) requirements)
  - (3) Sample Ship Instruction for Plastic Waste Control Program
  - (4) Table for Plastic Item Substitutes

1. Purpose. To prescribe policies and procedures for managing shipboard generated waste.
2. Cancellation. COMSCINST 5090.2.
3. Scope. This instruction applies to all civil manned ships, or other ships as directed by contract or memorandum of understanding.

4. Background

a. Reference (a) was designed to reduce the volume of ship generated garbage into the marine environment, with particular focus on preventing the discharge of plastics into the sea. Reference (b) implements reference (a) in the United States. The governing regulations are contained in reference (c).

b. Compliance with reference (a) requires planning, timely implementation and proper execution by all concerned.

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c. To ensure the protection of the health and safety of the crew, shipboard garbage management may be divided into four phases: collecting, processing, storing and disposing. Factors such as crew size, area of operations, available storage space and operating schedules will affect the appropriate processing and disposal of waste. Source elimination is vital to minimize workload and ensure compliance with sanitation and safety requirements.

d. Reference (d) authorizes certain U. S. Navy vessels to use an alternate compliance plan to meet reference (a) requirements. Certain U. S. Navy ships are allowed to discharge processed non-plastic garbage overboard without regard to MARPOL "special areas" requirements. At this time, no Military Sealift Command (MSC) ships are authorized to use this alternate compliance plan.

## 5. Definitions

a. Discharge: Any release of harmful substances from a ship. Discharges may be caused by escape, disposal, spilling, leaking, pumping, emitting or emptying.

b. Food Waste: Any spoiled or unspoiled victual substances, such as fruits, vegetables, dairy products, poultry, meat products, food scraps and all other such wastes, generated aboard ship, principally in galleys and dining areas.

c. Garbage: All kinds of victual, domestic and operational waste generated during normal ship operations and likely to be disposed of continuously or periodically.

d. MARPOL "Special Areas:" Sea areas where special prohibitions on garbage discharge exist. The following "Special Areas" are in effect as of the date of this instruction: the Baltic Sea, North Sea and Antarctic areas. The following "Special Areas" have been identified but are not effective as of the date of this instruction: the Mediterranean Sea area; the Black Sea area; the Red Sea area; the "Gulfs" area and the Wider Caribbean Region (including the Gulf of Mexico and the Caribbean Sea).

e. Medical Waste: Medical waste is divided into two categories, potentially infectious waste and other medical waste.

(1) Potentially infectious waste: Any material which may contain pathogens of sufficient virulence and quantity to cause an infectious disease. Examples are:

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<b>Isolation waste:</b>	<b>Generated by patients with a communicable disease, isolated to protect others.</b>
<b>Cultures and stocks of infectious agents and associated biologicals:</b>	<b>Specimens from medical and pathological labs, dishes and devices used to transfer and mix cultures. Discarded live or unattended vaccines.</b>
<b>Blood products:</b>	<b>Human blood and waste blood, serum, plasma and organs or tissue.</b>
<b>Sharps:</b>	<b>Needles, blades, scalpels.</b>
<b>Surgical waste including disposal gloves, plastics:</b>	<b>Drapes, lavage tubes, drainage sets, underpads, surgical IV tubing, syringes, pipettes, etc.</b>

(2) Other Medical Waste: Any material which does not fall in the categories as described above.

f. Plastic: Any high polymer nonmetallic compound synthetically produced. May be used as part of any of the following: packaging, vapor proof barriers, bottles, piping, floor coverings, rubberized material, paints, adhesives, electrical components and wiring, fishing nets, disposable eating utensils and cups, strapping bands, rope and line.

g. Solid Waste: Any garbage, refuse and other discarded material; including solid, liquid, semi-solid or contained gaseous materials resulting from normal ship operations. Does not include food contaminated plastic nor food waste.

## 6. Policy

a. MSC vessels will comply with references (a) and (c). Enclosure (1) summarizes these requirements, but readers should refer to specific U. S. Coast Guard regulations for the most recent and accurate information on the requirements.

b. Operational and training practices shall be instituted or modified to enable vessels to comply with the provisions of references (a) and (c).

c. MSC vessels will comply with reference (e). Enclosure (2) summarizes the requirements of reference (e).

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d. Accepting Plastic/Solid Waste

(1) When directed by the immediate operational Area Commander and when proper storage permits, MSC ships may accept properly packaged and documented plastic/solid waste from deployed U. S. Navy combatant ships, provided that the combatants are beyond a reasonable steaming time of port where plastic/solid waste may be disposed and that continued operations preclude them from removing the plastic/solid waste.

(2) In the execution of the above policy, the following additional guidance is provided. The transferring activity shall ensure that:

(a) All plastic/solid waste is properly labeled, packaged, containerized and documented in accordance with reference (f). In addition, the tri-wall shall first have been lined with a pallet shroud to provide a plastic barrier between the tri-wall and the waste.

(b) Each container shall be stenciled with type of material, UIC, ship name and document number.

(c) Vertical Replenishments (VERTREPS), of this material is only authorized in COMSERVFORSIXTHFLT/CTF-63 Area of Responsibility.

(d) Each transfer document will contain a fund cite to provide for the ultimate disposal/disposition of the plastic/solid waste.

(1) For plastics, the tri-wall shall be marked as follows in 6 inch letters: **“PLASTICS FOR DISPOSAL”** and the number of the tri-wall; i.e. 1/10, 2/10, etc.

(2) For solid waste, the tri-wall shall be marked as follows in 6 inch letters: **“SOLID WASTE FOR DISPOSAL”** and the number of the tri-wall; i.e. 1/10, 2/10, etc.

(e) The Commanding Officer/Master of the transferring ship shall have the material containers visually sighted by a responsible representative and certify on the transfer document that the containers are suitable for transfer.

(f) Any discrepancies shall be reported to the transferring ship with an info copy to the operational Area Commander. Also, the receiving ship has the right to refuse any material not meeting established transfer procedures.

(g) The transferring ship is responsible for any additional expenses incurred for the ultimate disposal/disposition of the material.

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(h) A comprehensive listing of all type containers and material(s) shall be provided to the receiving ship in advance of the scheduled transfer date. All transfers shall be approved by the operational Area Commander.

(i) Within 3 days prior to transfer, the receiving ship will inform the transferring ship of any items that cannot be accepted for transfer due to stowage space restrictions.

7. Action

a. The ship's Master shall:

(1) Develop a shipboard garbage management plan and designate a crewmember to be responsible for carrying it out. The plan shall establish policies, procedures and responsibilities to enable the ship to comply with references (a), (c) and (e).

(2) Review and update the shipboard garbage management plan as needed to reflect current shipboard practices. Enclosure (3) is a sample garbage management plan that may be adapted and tailored to an individual ship.

(3) Maintain a garbage disposal log in accordance with reference (c). The following information shall be recorded:

(a) Type of disposal operation (i.e., overboard, transfer to another ship, offload to reception facility, incineration).

(b) Date and time that operation took place.

(c) Name of port, if the operation was conducted in port, or latitude and longitude, along with ship's course, speed and start and stop times, if operation was performed at sea.

(d) Approximate volume or weight of garbage involved.

(e) A description of the garbage involved (i.e., mixed wastes, plastics, paper products, medical wastes, cardboard packaging materials, etc.).

(4) Make the garbage management plan and garbage disposal log available to U. S. Coast Guard and Ship Material Assessment and Readiness Testing (SMART) inspectors if requested.

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(5) Encourage all personnel to develop self-policing practices. Officially recognize personnel who develop more efficient methods of waste management.

(6) Initiate education programs to inform all personnel of the adverse effects of marine pollution. Raising awareness improves compliance.

(7) Ensure that crew information notices include periodic excerpts from current laws and regulations relating to pollution prevention. These notices will include information about penalties and fines, if applicable.

(8) Where possible, reduce the amount of disposable material brought onboard and modify standard practices to minimize waste generation.

(9) Ensure that appropriate placards are displayed to notify the crew and passengers of the ship's disposal requirements.

b. COMSC Maritime Forces and Manpower Management Director (N1) shall:

(1) Develop training for crewmembers in identification of different classes of waste and allowable disposal practices by July 1998. In addition to providing information on regulatory requirements, training shall include:

(a) Health and sanitation measures required to handle, store and dispose of wastes.

(b) Pest control procedures for waste storage areas.

(c) Operation, maintenance and cleaning instructions for waste processing equipment such as garbage grinders, compactors and incinerators installed onboard.

(d) Methods for preparing waste for overboard discharge.

(2) Ensure that all shipboard personnel are provided with training. Military and Civilian Personnel Officers will document training in personnel files.

(3) Provide educational materials to be distributed as they become available. This material will include printed brochures, posters, photographs, audio and video tapes and films.

c. COMSC Logistics Director (N4) shall, annually, provide a list of non-plastic substitutes for common shipboard items to all ships to all CIVMAR manned ships.

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d. COMSC Special Assistant for Environmental Programs (N00EP) shall:

(1) Incorporate this instruction as part of presentation packages for visits to ships.

(2) Develop crew information notices which include periodic excerpts from current laws and regulations relating to pollution prevention. These notices will include information about penalties and fines, if applicable.

## Distribution:

COMSCINST 5000.19

List I (Case A, B, C)

SNDL 41B (MSC Area Commanders)  
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 41J (OICMILDEPTs)  
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 41E (APMC)  
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 41L (MPSRONs)  
 41M (TAGOS Project Office & Det)

### SUMMARY OF MARPOL ANNEX V

Garbage Type	At-Sea Discharge Restrictions	MARPOL “Special Area” Discharge Restrictions
Plastics, including, but not limited to plastic packaging, synthetic ropes and plastic garbage bags	Prohibited	Prohibited
Dunnage and lining and packing materials which will float	As far as is practicable from the nearest land and is prohibited within 25 nautical miles of the nearest land	Prohibited
Food wastes	As far as us practicable from the nearest land, and is prohibited within 12 nautical miles of the nearest land. (Note 3)	As far as is practicable from the nearest land, and is prohibited within 12 nautical miles of the nearest land
All other garbage, including paper products, glass, metal bottles, crockery and similar refuse	As far as us practicable from the nearest land, and is prohibited within 12 nautical miles of the nearest land. (Note 3)	Prohibited

**Notes:**

1. The following “Special Areas” are now in effect: Baltic Sea, North Sea and Antarctic. Coast Guard representatives should be consulted periodically to ensure that the ship is aware of any new “Special Areas” brought into effect.
2. When garbage is mixed with other discharges having different disposal or discharge requirements, the more stringent requirements apply.
3. Disposal of ground garbage is permitted outside 3 nautical miles of the nearest land if the ground garbage is capable of passing through a screen with openings no greater than 25 millimeters.
4. Ships must have placards posted describing garbage discharge restrictions.
5. Ships must retain records of garbage discharges.
6. Ships must have a garbage management plan aboard.



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## **SUMMARY OF AFLOAT MEDICAL WASTE MANAGEMENT REQUIREMENTS**

1. Plastic medical waste generated aboard MSC ships will be retained for disposal ashore. Exceptions will only be granted by Commander, Military Sealift Command (COMSC). COMSC will only grant waivers for protection of the health and safety of the crew or for national security reasons in the event of a declared national emergency. The small amounts of medical waste likely to be generated on an MSC ship, when properly autoclaved or otherwise sterilized, should not present a health hazard to the crew.

2. Potentially infectious medical waste shall be handled and disposed of using special precautions. Accordingly, MSC civil service manned ships shall take the following actions:

a. Potentially infectious medical wastes shall be autoclaved, double-bagged in biohazard bags (NSN 6530-01-107-5799) and stored in a secure area until disposed of ashore.

b. Used sharps shall be collected in autoclavable sharps containers (NSN 6530-01-183-2863), autoclaved and retained onboard for disposal ashore. To avoid creating potentially infectious aerosols, needles shall not be clipped.

c. Medical waste will be properly segregated, labeled and packaged for shore disposal in accordance with reference (e).

d. Potentially infectious liquid waste may be disposed of in Marine Sanitation Device (MSD) systems after treatment (autoclave or chemical disinfection). Blood specimens, urine, other excreta not meeting the definition of potentially infectious waste, may be disposed into the MSD without prior treatment.

e. If retention of sterilized medical waste would endanger crew safety, create an unacceptable nuisance or compromise readiness:

(1) After autoclaving, potentially infectious medical waste may be incinerated aboard ship, if an approved incinerator is installed aboard.

(2) Overboard discharge may be authorized beyond 50 miles from shoreline, with prior approval from COMSC (N00M). Prior to at-sea disposal, Masters shall ensure the waste has been autoclaved, properly packaged and weighted for negative buoyancy to prevent the possibility it may wash ashore. An entry will be made in the ship's log indicating number of bags, containers discharged and time and position of overboard discharge.

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**SAMPLE SHIP INSTRUCTION FOR PLASTIC WASTE CONTROL PROGRAM**

USNS \_\_\_\_\_ (T-\_\_\_\_ \_\_\_\_\_)  
Shipboard Garbage Management Plan

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From: Master

To: All Personnel

Subj: DISPOSAL OF TRASH AND OTHER SOLID WASTES

Ref: (a) COMSCINST 5090.2A, Disposal of Solid Waste in the Marine Environment  
(b) Code of Federal Regulations, 33 CFR 151 - Vessels Carrying Oil, Noxious Liquid Substances, Garbage, Municipal or Commercial Waste and Ballast Water

1. Purpose. To document procedures and identify the crewmember responsible for managing shipboard solid waste.

2. Introduction

a. The International Maritime Organization (IMO) adopted Annex V of the International Convention for the Prevention of Pollution from Ships (MARPOL 73/78) in 1995. Annex V requires that all ships of 400 tons gross tonnage and above, and every ship certified to carry 15 persons or more shall carry a garbage management plan and shall be provided with a Garbage Record Book. In addition, all ships of 12 meters or more in length shall display placards to notify the crew and passengers of the ship's disposal requirements. A designated crewmember must be assigned to manage the garbage management plan.

b. The ship's garbage management plan should contain a list of the particular ship's equipment and arrangements for handling garbage. It shall provide written procedures for collecting, storing, processing and disposing of garbage, including the use of equipment onboard. It shall designate those persons responsible for carrying out various provisions of the plan.

3. Management Plan

a. Designated person in charge of carrying out the plan: \_\_\_\_\_

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(1) The designated person shall implement procedures and policies contained in this plan to ensure that the collection, separation and processing of garbage is accomplished in accordance with reference (a).

(2) The designated person shall be assisted by departmental staff as needed.

b. Procedures to reduce the volume of trash generated:

(1) Maintain equipment such as scullery machines, dishwashers and garbage grinders in top operating condition to avoid requiring the use of disposable dinnerware or limiting disposal options for food waste.

(2) When requisitioning provisions and replenishment supplies, request non-plastic substitutes for items such as plastic or styrofoam cups, plates, utensils and garbage bags if available.

(3) Where possible, remove plastic overwrap prior to departure.

(4) Reuse bulk packaging materials and containers when practicable.

(5) Use washable rags for general cleaning instead of disposable rags.

(6) When weather conditions require that stored wastes be protected from the elements, use canvas tarps or other re-usable materials.

(7) Reuse dunnage, shoring, lining and barrier material if in good condition.

(8) Ensure pallet loads are well secured to prevent loss.

b. Procedures for collecting garbage:

(1) Table (1) lists location and quantity of all trash receptacles. Segregated receptacles shall be placed throughout the ship, including galleys, mess decks, staterooms, engineering spaces and general work areas.

(2) All hands will be expected to segregate waste products. Trash receptacles will be clearly labeled and signs posted to alert crewmembers and passengers regarding the importance of segregation and what items should be placed in each type of receptacle.

(3) To the greatest extent practicable, food wastes and wastes contaminated by food products shall be segregated from "clean" wastes.

(4) All plastic waste shall be separated from biodegradable waste products and discarded into receptacles labeled "plastic waste."

(5) Biodegradable wastes shall be collected in "non-plastic waste only" receptacles.

(6) Dunnage, lining and packing material shall be collected on the weather deck, in a sheltered area.

(7) Plastic medical waste if necessary, shall be properly autoclaved or otherwise sterilized. Plastic medical waste shall be segregated from other plastic waste and discarded into "plastic medical waste only" receptacles.

(8) Potentially infectious medical waste shall be handled and disposed of using special precautions, as follows:

(a) Potentially infectious medical wastes shall be autoclaved, double-bagged in bio-hazard bags (NSN 6530-01-107-5799) and stored in a secure area.

(b) Used sharps shall be collected in autoclavable sharps containers (NSN 6530-01-183-2863), autoclaved and stored in a secure area. To avoid creating potentially infectious aerosols, needles will not be clipped.

c. Procedures for processing and storing garbage:

(1) Table (2) lists the trash management equipment installed onboard.

(2) Trash shall be collected on a daily basis.

(3) If the ship is operating in waters where discharge is allowed, garbage grinders shall be used to process and discharge food wastes.

(4) Waste classified material and other paper products shall be incinerated. Ash will be removed periodically, bagged and stored in the trash storage locker.

(5) Other trash shall be compacted and stored in the trash storage locker.

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d. Procedures for disposing of garbage:

(1) Disposal of garbage shall be in accordance with references (a) and (b). A summary table of MARPOL Annex V disposal restrictions is provided in enclosure (1) of reference (a). Exemptions are allowed to ensure safety of the ship or those onboard and for discharges of wastes resulting from damage to the ship.

(2) Medical waste shall be retained for shore disposal. If retention of sterilized medical waste would endanger crew safety or compromise mission readiness:

(a) After autoclaving, potentially infectious medical waste may be incinerated.

(b) Medical wastes may be discharged at sea if the permission is granted by COMSC, and the vessel is more than 50 nm from shore. Prior to discharge, the waste must be autoclaved, properly packaged and weighted for negative buoyancy to minimize the possibility that it may wash ashore.

(c) Potentially infectious liquid waste may be disposed of in the ship's Marine Sanitation Device (MSD) system after treatment (autoclave or chemical disinfection).

(3) A garbage disposal log shall be maintained in accordance with references (a) and (b), recording all garbage discharges or disposal processing. The Mate on Watch shall ensure log entries are maintained. The following information shall be recorded:

(a) Type of disposal operation (i.e., overboard, transfer to another ship, offload to reception facility, incineration)

(b) Date and time that operation took place.

(c) Name of port, if the operation was conducted in port, or latitude and longitude, if operation was performed at sea.

(d) Approximate volume or weight of garbage involved.

(e) A description of the garbage involved (i.e., mixed wastes, plastics, paper products, medical wastes, cardboard packaging materials, etc.)

**Table (1)**

<b>Compartment Number</b>	<b>Number of Plastic Receptacles</b>	<b>Number of Non-Plastic Receptacles</b>

**Table (2)**

<b>Equipment</b>	<b>Location</b>	<b>Quantity</b>
<b>Incinerator</b>		
<b>Trash compactor</b>		
<b>Garbage grinder</b>		

## TABLE FOR PLASTIC ITEM SUBSTITUTES

### FOOD SERVICE SUPPLIES

PLASTIC ITEM		NON-PLASTIC ALTERNATE	
<b>Disposable Hot Drink Cup:</b>		<b>100% Paper Hot Drink Cup:</b>	
7350-00-162-3006	8 ounce	7350-01-359-9524	8 ounce
7350-01-056-2896	8 ounce	7350-01-359-9524	8 ounce
<b>Disposable Squat Style Cup:</b>		<b>100% Paper Squat Style Cup:</b>	
7350-00-641-4520	8 ounce	7350-01-411-5268	8 ounce
7350-00-290-0586	16 ounce	7350-01-411-5269	16 ounce
<b>Coffee Stirring Stick:</b>			
7340-01-060-6243	5 inch	7340-00-753-5565	5½ inch wood

### OFFICE SUPPLIES

PLASTIC ITEM		NON-PLASTIC ALTERNATE	
<b>Ruler:</b>			
7510-00-935-1005	12 inch	7510-00-161-6215	12 inch wood
<b>Note Pad Binder:</b>		<b>Aluminum Binder:</b>	
7510-00-145-0296	8½" x 11"	7510-00-286-6954	8½" x 11"
<b>Loose Leaf Binder:</b>			
7510-00-187-6489	8½" x 11"	7510-00-582-5399	8½" x 11"
<b>Staple Remover:</b>			
7520-00-162-6177	tweezer type	7520-00-257-5006	plier type
<b>Index Tabs:</b>			
7510-00-147-8462	clear plastic	7510-00-282-6926	paper, ½" diam.

### PACKAGING SUPPLIES

PLASTIC ITEM		NON-PLASTIC ALTERNATE	
<b>Cushioning and Dunnage:</b>		<b>Cellulosic Dunnage:</b>	
8135-01-232-6825	24" fire retardant	8135-00-973-1835	24" fire retardant
8135-00-926-8991	24 inch wide	8135-00-808-6446	24 inch wide
8135-00-142-9004	48 inch wide	8135-00-966-2533	48 inch wide
<b>Packing List Envelope:</b>			
8105-00-857-2247	4¾" x 7"	8105-01-412-0751	4¾" x 7"
8105-00-139-1276	5" x 8½"	8105-00-290-4363	6" x 9"
<b>General Purpose Tape:</b>			
7510-00-550-7126	½" red	7510-01-096-5661	½" red paper
7510-00-266-5016	2" olive drab	7510-00-297-6655	2" paper, tan
7510-00-079-7905	3" tan	7510-00-297-6656	3" paper, tan
<b>Twine:</b>			
4020-00-855-2144	32 lb strength	4020-00-231-5886	32 lb strength
4020-00-587-0944	100 lb strength	4020-00-231-5870	100 lb strength

### CLEANING SUPPLIES

PLASTIC ITEM		NON-PLASTIC ALTERNATE	
<b>Plastic Reinforced Towel:</b>		<b>Nonplastic Reinforced Towel:*</b>	
7920-00-823-9773	13" x 14"	7920-01-370-1364	12½" x 14"
7920-00-823-9772	13" x 18"	7920-01-370-1365	14" x 16"
<b>Polypropelene Towels:</b>		<b>Cotton Towels:*</b>	
7920-00-177-3633	12" x 17"	7920-00-260-1279	16½" x 18"
<b>Cleaning Pads in a Plastic Bag:</b>		<b>Cleaning Pads in a Paper Band:</b>	
7920-00-753-5242	6" x 9½" x ¼"	7920-01-383-7928	6" x 9½" x ¼"

\*Not to be disposed into the ocean if contaminated with hazardous material.

### CLEANING SUPPLIES (Cont'd)

PLASTIC ITEM		NON-PLASTIC ALTERNATE	
<b>General Purpose Cleaner:</b>		<b>Concentrated Cleaner:</b>	
7930-00-926-5280	16 ounce spray	7930-01-367-2909	15 gram packet
7930-00-357-7386	22 ounce spray	7930-01-367-2909	15 gram packet
7930-00-068-1669	½ gallon refill	7930-01-367-2910	60 gram packet
<b>Glass Cleaner:</b>		<b>Concentrated Glass Cleaner:</b>	
7930-00-664-6910	8 ounce spray	7930-01-367-2959	14 gram packet
7930-00-184-9423	1 gallon	7930-01-367-2959	14 gram packet
<b>Disinfectant:</b>		<b>Concentrated Disinfectant:</b>	
6840-00-687-7904	1 quart, pine oil	6840-01-367-2914	15 gram packet
<b>Dishwashing Compound:</b>		<b>Dishwashing Concentrate:</b>	
7930-00-880-4454	1 gallon	7930-01-367-2964	15 gram packet
<b>Trash Bag:</b>		<b>Wet Strength Paper Trash Bag:</b>	
8105-01-184-7159	6 gallon	8105-01-284-2923	7 gallon
8105-01-183-9768	32 gallon	8105-01-284-2924	30 gallon
<b>Spray Bottle:</b>		<b>Rechargeable Spray Bottle:</b>	
8125-00-488-7952	16 ounce	3740-00-720-0465	32 ounce metal
<b>Pail:</b>			
7240-00-246-1097	12 quart	7240-00-274-3875	12 quart steel
<b>Scrub Brush:</b>			
7920-00-061-0038	3" x 9¼"	7920-01-067-6203	2-7/8" x 8½"
7920-00-059-2776	5/8" diameter	7920-00-356-4694	½" diameter
7920-00-959-5248	1-3/8" diameter	7920-00-889-3381	1¼" diameter
7920-00-772-5800	sanitary brush	7920-00-234-9317	sanitary brush
<b>Dusting Brush:</b>			
7920-00-240-6358	13" long	7920-00-233-3737	24" long
<b>Floor Polishing Pad:</b>			
7910-00-685-3908	14" buffing	7910-00-985-6800	14" buffing
7910-00-820-7991	14" buffing	7910-00-985-6800	14" buffing
7910-00-685-4242	14" stripping	7910-00-985-6869	14" stripping
7910-00-820-9918	14" stripping	7910-00-985-6869	14" stripping
7910-00-820-9898	20" buffing	7910-00-985-6857	20" buffing
<b>Dustpan:</b>			
7290-00-616-0109	11½" wide	7290-00-224-8308	12" wide steel

### MISCELLANEOUS

PLASTIC ITEM		NON-PLASTIC ALTERNATE	
<b>Wrench Set in Vinyl Roll:</b>		<b>Wrench Set Without a Roll:</b>	
5120-00-148-7917	12 pc box & open end	5120-01-408-3927	12 pc box & open end
<b>Plastic Funnels:</b>		<b>Galvanized Steel Funnels:</b>	
7240-00-826-4099	4 ounce	7240-00-243-3612	4 ounce brass
7240-00-243-3614	½ pint	7240-00-230-2393	1 pint
7240-00-404-9794	1 pint	7240-00-527-9868	1 quart
7240-00-404-9793	1 quart	7240-00-559-7364	1 qt, flexible spout
<b>Salt and Pepper Shakers:</b>		<b>Salt and Pepper Shakers:</b>	
7350-00-655-5255	3 oz salt shaker	7350-00-680-2630	2 ounce shaker
7350-00-655-5254	3 oz pepper shaker		
<b>Painter's Dropcloths:</b>		<b>Dropcloths, 100% Cotton:</b>	
8340-00-068-7908	clear, 9' x 12'	8340-00-205-1910	6' x 10'
		8340-00-205-1911	10' x 12'

 = High volume shipboard use item