



UNITED STATES MARINE CORPS
U.S. MARINE CORPS AIR STATION
YUMA, ARIZONA 85369-5000

StaO 4555.1
3KD
17 Dec 91

STATION ORDER 4555.1

From: Commanding Officer
To: Distribution List

Subj: RECOVERY AND UTILIZATION OF PRECIOUS METALS

Ref: (a) DOD 4160.21-M
(b) DRMS-M 4610.12
(c) NAVSUPINST 4570.23A
(d) MCO 4555.3C

Encl: (1) List of Potential Sources of Precious Metals
(2) List of Items with high Precious Metal Content
(3) List of Precious Metals NSNS controlled by the Navy

1. Purpose. To establish Station policy as outlined in references (a) through (d) for the recovery of precious metals contained in excess material, residual material, and scrap generated by station and tenant units.

2. Background

a. The Department of Defense (DOD) Precious Metals Recovery Program (PMRP) is assigned to the Defense Logistics Agency (DLA). Under DLA, the Defense Reutilization and Marketing Service, DRMS-OCP, Federal Center, Battle Creek, Michigan 49107, is responsible for programs associated with the collection, recovery, and processing of precious metals which include silver, gold, platinum, and the platinum family of noble metals (palladium, iridium, rhodium, osmium, and ruthenium). The Defense Industrial Supply Center (DISC) is responsible as the commodity integrated material manager (CIMM) for supply management of the refined precious metals recovered under the PMRP. The expenditure of available resources to recover these precious metals is justified by such factors as the criticalness of chemical properties of these metals, the relative ease of recovery procedures, and the current high prices of precious metals on the open market.

b. A precious metal indicator code (PMIC) has been developed and incorporated in the Defense Integrated Data System (DIDS) and Military Standard Requisitioning and Issue Procedure (MILSTRIP) Programs. DOD item managers will assign a PMIC to every item in the supply system. Retroactive coding will be accomplished on an item-by-item basis as file maintenance is required. The PMIC is a mandatory entry on all disposal related MILSTRIP documents. Liaison with the DOD item manager will be required when an item has not been assigned a PMIC in the DIDS.

17 Dec 91

3. Policy

a. Participation in the PMRP is mandatory for all Marine Corps activities.

b. Reutilization of excess precious metal-bearing items will take precedence over precious metal recovery.

c. Station and tenant units will turn in precious metals to the local DRMO which will process the material through the Precious Metals Recovery Program established by DLA.

4. Procedures

a. Recovery

(1) Identification of precious metal-bearing scrap is a key element of the PMRP. Enclosure (1) provides information for use in the identification of precious metal-bearing items. Enclosure (2) provides a list of items with high precious metal content. Enclosure (3) provides precious metals NSNS controlled by the Navy. Activities should also consult the precious metals master file to identify items or components containing recoverable amounts of precious metals. The file is available at Supply Department, Code 3KD.

(2) Precious metals and precious metal-bearing scrap will be segregated from nonprecious material by generic category; i.e., silver, gold, platinum, etc. Suitable controls against loss by theft will be established; and a locked storage area, with limited access for authorized personnel only, will be provided. Safeguards will be established to ensure accountability and control of precious metals between pickup and delivery points.

(3) Marine Corps activities will not discard unserviceable precious metal-bearing items, scrap, residue, or waste but will collect, segregate, and store the material securely until it can be turned into the Defense Reutilization and Marketing Office (DRMO).

(4) Precious metal-bearing scrap and waste material will be segregated, as required in the preceding, prior to turn-in to DRMO. Include on the disposal turn-in document (DTID) any available information pertaining to precious metal content (metal type, quantity, and location within the item) of the scrap material turned in. A receipt will be obtained at the time of turn-in.

(5) Transportation, packaging, crating, and handling costs incurred in the shipment or transfer of precious metal-bearing material from a generating activity to the servicing DPDO will be borne by the generating activity.

b. Utilization. Activities procuring precious metals or precious metal-bearing material will screen the DOD inventory of Government-

17 Dec 91

owned assets of precious metals and utilize these assets as GFM in lieu of contractor-furnished material (CFM) in production contracts for major systems and equipment when such action is determined to be more advantageous to the Government.

5. Action

a. All commanding officers, officers-in-charge, department heads and tenant units are to familiarize themselves with references (a) through (d) and enclosures (1), (2), and (3). Assistance will be provided by the local DRMO and Supply Department, Code 3KD to identify excess items. Where doubt exists as to precious metal content of any item or scrap, it will be referred to DRMO or the Supply Department.

b. In the event of an aircraft mishap/crash, the SOMS IMA Officer will assist the unit involved with the disposition of components/wreckage. Additional assistance will be provided by the Supply Department or DRMO as the case may dictate.

6. Concurrence. The Commanding Officers of MAG-13, 2d LAAM Bn, MACS-7, MWSS-371, VMFT-401, MAWTS-1, and CSSD-16 concur in and make this directive applicable to all 3rd and 4th MAW units located at MCAS, Yuma.



C. T. DUNSTAN

By direction

DISTRIBUTION: B

17 Dec 91

LIST OF POTENTIAL SOURCES OF PRECIOUS METALS

1. GENERAL. Precious metal-bearing items, residue and material include but are not limited to: gold, silver, platinum and the platinum group from prosthetic appliances; gold, silver, platinum and platinum group grindings and dust; gold or silver lined, clad, or plated decorations, badges, awards, medals, buttons and other insignia; silver batteries, silver and gold wire; platinum and palladium wire; silver and gold turnings; spent hypo (fixer) solutions, exposed silver-bearing film/paper regardless of format or condition; unexposed outdated film/paper; dental amalgam scrap; electrical and electronic hardware containing gold, silver, platinum, or any of the platinum group metals; microfilm masters and reproducing paper; precious metal-bearing solutions such as silver nitrate; disposable EKG electrodes.

2. National Stock Number (NSN) items which contain potentially recoverable fine precious metals are coded in the Navy Master Data List (NMDL) under the Precious Metal Indicator (PMI).

3. SCRAP SOURCES:

A. Silver Bearing Materials:

Anodes
Assemblies - Electrical
Silver/Copper Batteries

Silver/Cadmium Batteries
Silver/Zinc Batteries

Silver/Magnesium Batteries
Blanking Scrap - Punchings
Brazing Alloys
Brushes - Electric Motors
Bullion
Chemical Salts
Clad Bi-Metal Parts

Coin Silver
Contacts

Dental Amalgam
Film
 Industrial X-Ray
 Medical X-Ray

Lithographic

B. Gold Bearing Materials:

Brazing Alloys
Clad Metal Parts
Electrical Contacts
 Dental Alloys
Dental Scrap
Dental Sweeps and
 Grindings
Diodes
Filled Scrap
Filters - Plating
 Flakes
 Flashings
 Foil
Hook - Plating -
 Nodules
Jewelry Scrap
Jewelry Sweeps and
 Grindings
Paints and Paste
Peelings
Placer Gold
Plated Parts -
 Electrical
Plated Wire

Enclosure (1)

17 Dec 91

A. Silver Bearing Materials:
(Cont'd.)

Photographic Negatives
Filters -Plating

Flake - From Hypo Solution
Recovery Systems
with Components
Hooks - Plating - Nodules
Jewelry Sweeps
Paints - Paste
Paper-Reproduction
Plated Parts - Electrical
-Electronic
Plated Serving Pieces
Plated Utensils
Plated Wire
Powders - Granulated
Punchouts
Relays - Electrical
Resins
Silver Lined Bearings -
Diesel Locomotives and Aircraft
Sludges - Plating and Precipitates
Solutions - Plating
Sterling Silver
Tin Lead Alloys - Contaminated
Turnings
Wave Guides
Wiping Rags

B. Gold Bearing Materials:
(Cont'd.)

Powders
Printed Circuit
Boards
Printed Circuit
Boards

Punchouts
Resins - Plating
Salts - Chemical
Sludges - Plating
Solutions
Sponge
Tin Lead Alloys -
Contaminated
Transistors
Wiping Rags
Wire

C. Platinum Bearing
Materials:

Catalysts
Chemicals
Clad Materials
Contacts
Dental Alloys
Dental Scrap
Dental Sweeps/Grindings
Jewelry Scrap/Sweep
Laboratory Ware
Magneto Points
Powders and Paste
Solutions - Plating
Spark Plugs - Aircraft
Thermocouple Wire

D. Palladium Bearing
Materials:

Catalysts
Clad Materials
Contact Points
Dental Alloys
Dental Scraps
Dental Sweeps
Jewelry Scrap/Sweep
Paste
Plated Parts
Powders
Relays - Electrical
Salts - Chemicals
Sludges/Solutions
Wire

Enclosure (1)

E. Scrap Containing Combinations of Precious Metals
(Gold, Silver, Platinum and Palladium):

Assemblies - Components
Bullion
Carbon
Catalysts
Chemicals
Chips
Drillings
Electronic Scrap
High Temperature Resistant Alloys
Paints
Paste
Powders
Relays - Electrical
Resins
 Ribbons
 Rings
 Salts
 Solutions
 Sweeps
 Telephone Switching Scrap
 Thick Film
 Wire

4. SCRAP CATEGORIES:

- | | |
|---------------------------|--------------------|
| A. Solution | G. Metal Scrap |
| 1. Acid | I. Non Magnetic |
| 2. Basic | 1. Impure Gold |
| 3. Matrix if known | 2. Impure Silver |
| B. Resin | 3. Copper Base |
| C. Sludges | 4. Aluminum Base |
| D. Burnable Material | 5. Brass Base |
| 1. Carbon | 6. Bronze Base |
| 2. Filters | 7. Molybdenum Base |
| 3. Film | 8. Beryllium Base |
| 4. Papers | 9. Lead Base |
| 5. Unprepared Sweeps | 10. Tin Base |
| 6. Others | 11. Other |
| E. Sweeps (Prepared) | II. Magnetic |
| F. Printed Circuit Boards | 1. Kovar Base |
| 1. Punch Outs | 2. Stainless |
| 2. Non-Assembled | Steel Base |
| 3. Assembled | 3. Iron Base |
| 4. Other | 4. Nickel Base |
| | 5. Other |

Enclosure (1)

StaO 4555.1
17 Dec 91

H. Glass to Metal Tubes, etc.

1. Solid Precious Metal Parts
2. Alloyed Metal Parts
3. Plated Metal Parts
4. Ceramics
5. Thick Film
6. Other

I. Catalyst

1. Carbon
2. Alumina
3. Rare Earth
4. Silica
5. Other

Enclosure (1)

LIST OF ITEMS WITH HIGH PRECIOUS METAL CONTENT

<u>NSN</u>	<u>Nomenclature</u>
3426-00-262-3843	Anode, Plating
3426-00-640-3758	Anode Plating
3439-00-262-4190	Brazing Alloy, Silver
3439-00-046-3655	Brazing Alloy, Silver
3439-00-058-0094	Brazing Alloy, Silver
3439-00-070-2289	Brazing Alloy, Silver
3439-00-121-5441	Brazing Alloy, Silver
3439-00-184-8948	Brazing Alloy, Silver
3439-00-224-3561	Brazing Alloy, Silver
3439-00-224-3573	Brazing Alloy, Silver
3439-00-238-3077	Brazing Alloy, Silver
3439-00-247-6926	Brazing Alloy, Silver
3439-00-262-4180	Brazing Alloy, Silver
3439-00-262-4184	Brazing Alloy, Silver
3439-00-262-4185	Brazing Alloy, Silver
3439-00-262-4186	Brazing Alloy, Silver
3439-00-262-4188	Brazing Alloy, Silver
3439-00-262-4189	Brazing Alloy, Silver
3439-00-262-4191	Brazing Alloy, Silver
3439-00-262-4192	Brazing Alloy, Silver
3439-00-262-4193	Brazing Alloy, Silver
3439-00-262-4197	Brazing Alloy, Silver
3439-00-262-4199	Brazing Alloy, Silver
3439-00-262-4200	Brazing Alloy, Silver
3439-00-262-4201	Brazing Alloy, Silver
3439-00-270-3771	Brazing Alloy, Silver
3439-00-275-3196	Brazing Alloy, Silver
3439-00-348-9419	Brazing Alloy, Silver
3439-00-361-1385	Brazing Alloy, Silver
3439-00-410-9138	Repair Kit, Silver B
3439-00-483-0007	Brazing Alloy, Silver
3439-00-492-3799	Brazing Alloy, Silver
3439-00-528-3882	Brazing Alloy, Silver
3439-00-540-2675	Brazing Alloy, Silver
3439-00-555-2870	Brazing Alloy, Silver
3439-00-602-5872	Brazing Alloy, Silver
3439-00-606-5433	Brazing Alloy, Silver
3439-00-824-9855	Brazing Alloy, Silver
3439-00-825-4855	Brazing Alloy, Silver
3439-00-854-4116	Brazing Alloy, Silver
3439-00-854-4142	Brazing Alloy, Silver
3439-00-854-4143	Brazing Alloy, Silver
3439-00-881-0506	Brazing Alloy, Silver
3439-00-881-0507	Brazing Alloy, Silver

Enclosure (2)

NSN

Nomenclature

3439-00-891-5162	Brazing Alloy, Silver
3439-00-902-9725	Brazing Alloy, Silver
3439-00-956-4183	Brazing Alloy, Silver
3439-00-968-3557	Brazing Alloy, Silver
3439-00-988-3882	Brazing Alloy, Silver
3439-00-996-1819	Brazing Alloy, Silver
3439-01-012-6385	Brazing Alloy, Silver
3439-01-016-5816	Wire, Spray Gun
3439-01-019-6260	Brazing Alloy, Silver
3439-01-045-9144	Brazing Alloy, Silver
3439-01-048-7821	Brazing Alloy, Silver
3439-01-051-0542	Brazing Alloy, Silver
3439-01-068-3986	Brazing Alloy, Silver
3439-01-068-8533	Brazing Alloy, Silver
3439-01-097-2158	Brazing Alloy, Silver
3439-00-346-0188	Brazing Alloy, Silver
4610-00-372-0592	Brazing Alloy, Silver
6140-01-071-6198	Desalter Kit, Sea Water
6515-00-314-0700	Battery, Storage
6515-00-314-0710	Cannula, Laryngeal
6515-00-318-4500	Cannula, Laryngeal
6515-00-318-4510	Electrode, Cautery
6515-00-318-4520	Electrode, Cautery
6515-00-318-4900	Electrode, Cautery
6515-00-318-4910	Electrode, Cautery
6515-00-318-4920	Electrode, Cautery
6515-00-318-4950	Electrode, Cautery
6515-00-356-9500	Electrode, Cautery
6515-00-357-3525	Probe, General Operation
6515-00-368-5500	Probe Set, Lachrymal
6515-00-377-7380	Spatula, Eye
6515-00-526-1259	Clip, Hemostatic
6515-00-782-3924	Probe, Lachrymal
6520-00-080-1651	Anesthesia, Apparatus
6520-00-145-0176	Silver Alloy, Pellet
6520-00-145-0349	Gold Alloy, Casting
6520-00-145-0350	Gold Alloy, Casting
6520-00-580-2550	Gold Alloy, Casting
6520-00-580-5250	Platinum, Foil
6520-00-580-5450	Brazing Alloy, Gold
6520-00-580-5650	Brazing Alloy, Gold
6520-00-580-5850	Brazing Alloy, Gold
6520-00-580-6950	Brazing Alloy, Gold
6520-00-817-2517	Wire, Nonelectrical
6520-00-817-2518	Gold Foil, Cylinder
6520-00-817-2519	Gold Foil, Cylinder
	Gold Foil, Cylinder

Enclosure (2)

NSN

Nomenclature

6520-00-853-8346	Silver Alloy, Pellet
6520-00-890-2170	Gold Powder-Foil Pe
6520-00-890-2198	Point Assortment, Pu
6520-00-904-7913	Point Assortment, Pu
6520-00-926-2113	Silver Alloy, Pellet
6520-01-018-3788	Point, Pulp Canal, De
6520-01-018-3789	Point, Pulp Canal, De
6520-01-018-3790	Point, Pulp Canal, De
6520-01-018-3791	Point, Pulp Canal, De
6520-01-050-7949	Gold Powder-Foil St
6520-01-070-0443	Silver Alloy Powder
6520-01-070-0444	Silver Alloy Powder
6520-01-070-0470	Silver Alloy Powder
6520-01-070-7521	Silver Alloy Powder
6520-01-070-7540	Silver Alloy Pellet
6520-01-071-6647	Silver Alloy Pellet
6520-01-072-1388	Silver Alloy Powder
6520-01-072-1389	Silver Alloy Powder
6520-01-072-1390	Silver Alloy Powder
6520-01-072-1391	Silver Alloy Powder
6520-01-084-8926	Silver Alloy Powder
6520-01-084-8927	Silver Alloy Powder
6520-01-094-1969	Silver Alloy Pellet
6520-01-094-6140	Silver Alloy Pellet
6520-01-113-9212	Silver Alloy Powder
6520-01-113-9213	Silver Alloy Powder
6520-01-131-0642	Silver Alloy Powder
6520-01-131-7925	Silver Alloy Powder
6520-01-144-5282	Silver Alloy Powder
6520-01-144-5283	Silver Alloy Powder
6520-01-154-1723	Gold Alloy Casting
6520-01-154-1724	Gold Alloy Casting
6520-01-154-1725	Gold Alloy Casting
6520-01-154-1726	Gold Alloy Casting
6520-01-154-1727	Gold Alloy Casting
6520-01-154-1728	Gold Alloy Casting
6520-01-154-1729	Gold Alloy Casting
6520-01-154-1730	Gold Alloy Casting
6520-01-154-1731	Gold Alloy Casting
6520-01-154-1732	Gold Alloy Casting
6520-01-154-1733	Gold Alloy Casting
6520-01-157-9107	Gold Alloy Casting
6540-00-782-6502	Frame, Spectacle
6640-01-025-3176	Loop, Inoculating, La
6640-01-117-9692	Loop, Inoculating, La
6665-00-429-6025	Filament, Combustible

Enclosure (2)

17 Dec 91

NSN

6665-00-542-1442
6850-01-063-4883
9545-00-010-3954
9545-00-050-8891
9545-00-127-7124
9545-00-204-3055
9545-00-264-3028
9545-00-299-8365
9545-00-299-8366
9545-00-299-8459
9545-00-299-8578
9545-00-299-8579
9545-00-345-8378
9545-00-448-9010
9545-00-448-9110
9545-00-649-7822
9545-01-071-1517
9545-01-082-3430
9545-01-150-8812
9660-00-042-7733
9660-00-042-7765
9660-00-042-7768
9660-00-106-9432
9660-00-151-4050
9660-01-010-2625
9660-01-011-1937
9660-01-039-0313
9660-01-039-0320

Nomenclature

Indicator, Combustible
Brush Plating Solution
Wire, Nonelectrical
Wire, Nonelectrical
Wire, Nonelectrical
Silver Sheet
Silver Sheet
Wire, Nonelectrical
Wire, Nonelectrical
Wire, Nonelectrical
Silver Sheet
Silver Sheet
Silver Sheet
Wire, Nonelectrical
Wire, Nonelectrical
Silver Sheet
Wire, Nonelectrical
Silver Ribbon
Ribbon, Silver
Gold, Reclaimed
Palladium Reclaimed
Platinum, Reclaimed
Silver Reclaimed
Platinum, Reclaimed
Rhodium Reclaimed
Iridium, Reclaimed
Ruthenium, Reclaimed
Palladium Reclaimed

Enclosure (2)

17 Dec 91

LIST OF PRECIOUS METALS NSNS CONTROLLED BY THE NAVY

<u>NSN</u>	<u>NOMENCLATURE</u>
3426-00-262-3843	Anode, Plating, Silver
3426-00-640-3758	Anode, Plating, Silver
3439-00-070-2289	Brazing Alloy, Gold
3439-00-968-3557	Brazing Alloy, Silver
3439-01-012-6385	Wire, Spray Gun, Silver
3439-01-051-0542	Brazing Alloy, Silver
6140-01-071-6198	Battery, Storage, Silver
6520-00-145-0176	Gold Alloy, Casting, Dental
6520-00-145-0349	Gold Alloy, Casting, Dental
6520-00-145-0350	Gold Alloy, Casting, Dental
6520-00-580-2550	Platinum Foil
6520-00-580-5250	Brazing Alloy, Gold
6520-00-580-5450	Brazing Alloy, Gold
6520-00-817-2517	Gold Foil, Cylinder, Dental
6520-00-853-8346	Silver Alloy, Pellet, Dental
6520-00-890-2170	Gold Powder-Foil Pellet, Dental
6520-00-926-2113	Silver Alloy Pellet, Dental
6520-01-050-7949	Gold Powder-Foil Strip, Dental
6520-01-070-0443	Silver Alloy Powder & Mercury
6520-01-072-1389	Silver Alloy Powder & Mercury
6520-01-072-1391	Silver Alloy Powder & Mercury
6520-01-084-8927	Silver Alloy Powder & Mercury
6520-01-094-1969	Silver Alloy Pellet, Dental
6520-01-094-6140	Silver Alloy Pellet
6520-01-113-9212	Silver Alloy Powder & Mercury
6520-01-113-9213	Silver Alloy Powder & Mercury
6520-01-131-0642	Silver Alloy Powder & Mercury
6520-01-131-7925	Silver Alloy Powder & Mercury
6520-01-144-5282	Silver Alloy Powder & Mercury
6520-01-144-5283	Silver Alloy Powder & Mercury
6520-01-154-1723	Gold Alloy, Casting, Dental
6520-01-154-1724	Gold Alloy, Casting, Dental
6520-01-154-1725	Gold Alloy, Casting, Dental
6520-01-154-1726	Gold Alloy, Casting, Dental
6520-01-154-1727	Gold Alloy, Casting, Dental
6520-01-154-1728	Gold Alloy, Casting, Dental
6520-01-154-1729	Gold Alloy, Casting, Dental
6520-01-154-1730	Gold Alloy, Casting, Dental
6520-01-154-1731	Gold Alloy, Casting, Dental
6520-01-154-1732	Gold Alloy, Casting, Dental
6520-01-154-1733	Gold Alloy, Casting, Dental
6520-01-157-9107	Gold Alloy, Casting, Dental

Enclosure (3)

17 Dec 91

NSN

NOMENCLATURE

6640-01-025-3176	Loop, Inoculating, Lab, Rhod/Plat
6640-01-117-9692	Loop, Inoculating, Lab
6640-01-158-7603	Loop, Inoculating, Lab
6665-00-429-6025	Filament, Comb Gas Indic Plat
6665-00-542-1442	Indicator, Combustible
6850-01-063-4883	Brush Plating Solution, Gold
9545-00-010-3954	Wire, Nonelectrical, Platinum
9545-00-127-7124	Wire, Nonelectrical, Silver
9545-00-204-3055	Silver Sheet
9545-00-264-3028	Silver Sheet
9545-00-299-8578	Silver sheet
9545-00-299-8579	Silver Sheet
9545-00-345-8378	Silver Sheet
9545-00-649-7822	Wire, Silver
9545-01-082-3430	Silver Ribbon
9545-01-150-8812	Silver Ribbon
9660-00-042-7733	Gold, Reclaimed
9660-00-042-7765	Palladium, Reclaimed
9660-00-042-7768	Platinum, Reclaimed
9660-00-106-9432	Silver, Reclaimed
9660-00-151-4050	Platinum, Reclaimed
9660-01-010-2625	Rhodium, Reclaimed
9660-01-011-1937	Iridium, Reclaimed
9660-01-039-0313	Ruthenium, Reclaimed
9660-01-039-0320	Palladium, Reclaimed

Enclosure (3)