



DOD INSTRUCTION 4715.23

INTEGRATED RECYCLING AND SOLID WASTE MANAGEMENT

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| Cancels: | DoD Instruction 4715.4, "Pollution Prevention," June 18, 1996 |
| Approved by: | Frank Kendall, Under Secretary of Defense for Acquisition, Technology, and Logistics |
| Change 1 Effective: | Karen Saunders, Chief of Staff |

Purpose: In accordance with the authority in DoD Directives (DoDDs) 5134.01 and 4715.1E, this issuance:

- Establishes policy, assigns responsibility, and prescribes procedures to implement integrated solid waste management (ISWM) through waste prevention and recycling. These programs will reduce the generation or volume of solid waste for disposal and the impact of DoD activities on the environment in accordance with Section 2577 of Title 10, United States Code (U.S.C.); Part 172 of Title 32, Code of Federal Regulations (CFR); the goals and objectives of Section 6941a of Title 42, U.S.C.; and Executive Order (E.O.) 13693.
- Establishes the DoD ISWM Working Group.

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SECTION 1: GENERAL ISSUANCE INFORMATION

1.1. APPLICABILITY. This issuance:

a. Applies to:

(1) The Office of the Secretary of Defense, the Military Departments, the Office of the Chairman of the Joint Chiefs of Staff and the Joint Staff, the Combatant Commands, the Office of the Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, and all other organizational entities within the DoD (referred to collectively in this issuance as the “DoD Components”).

(2) All DoD facilities and organizations in the United States (U.S.), including installations; government-owned, contractor-operated (GOCO) facilities; and DoD Components that are a host of or tenant on any DoD facility.

(3) All DoD facilities outside the U.S., if consistent with applicable international agreements and final governing standards (FGSs) issued for host nations or DoD 4715.05-G (also known and referred to in this issuance as the Overseas Environmental Baseline Guidance Document (OEBGD) where no FGSs have been issued).

(4) Offices in leased government or commercial space that will follow building owner requirements.

b. Does not apply to:

(1) Operations of U.S. military vessels or aircraft.

(2) Contingency basing and operational and training deployments, including cases of hostilities and hazardous areas, and when U.S. forces are operating as part of a multi-national force not under full control of the U.S.

1.2. POLICY. The DoD will:

a. Implement installation reuse, recycling, and ISWM programs that properly and cost effectively manage materials in accordance with the hierarchy outlined in Paragraph 3.2.

b. Maximize the recovery and recycling of useful materials and reduce the generation of solid waste and its disposal in accordance with Section 3.

c. Implement measures to achieve solid waste and construction and demolition (C&D) debris diversion goals in accordance with the DoD Strategic Sustainability Performance Plan pursuant to E.O. 13693.

d. Consolidate ISWM requirements under facilities operations, including solid waste diversion.

e. Establish no more than one qualified recycling program (QRP) in accordance with Section 2577 of Title 10, U.S.C., for the installation ISWM program that retains recyclable materials commodity sales proceeds. A regional QRP may serve more than one installation.

1.3. INFORMATION COLLECTIONS. The environmental compliance programs data requirements, referred to in Paragraphs 2.4.m. and 3.3. and Table 2, have been assigned report control number DD-AT&L (A,AR)2577 and is prescribed in DoD Instruction (DoDI) 4715.06. The expiration date of this information collection is listed in the DoD Information Collections System at <https://eitsdext.osd.mil/sites/DoDIIC/Pages/default.aspx> .

1.4. SUMMARY OF CHANGE 1. This change reassigns the office of primary responsibility for this issuance to the Under Secretary of Defense for Acquisition and Sustainment in accordance with the July 13, 2018 Deputy of Secretary of Defense Memorandum.

SECTION 2: RESPONSIBILITIES

2.1. ASSISTANT SECRETARY OF DEFENSE FOR ENERGY, INSTALLATIONS, AND ENVIRONMENT (ASD(EI&E)). Under the authority, direction, and control of the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)), the ASD(EI&E):

a. Establishes guidance for ISWM programs, as necessary, in accordance with DoDD 4715.1E and all applicable laws, regulations, E.O.s, associated policy, and guidance related to solid waste management.

b. Oversees the DoD Component ISWM programs and, in coordination with the DoD Components, develops strategic DoD-wide ISWM goals, requirements, priorities, and performance metrics.

c. Monitors implementation of this issuance and periodically reviews DoD Component ISWM programs. Develops supporting guidance, including DoD issuances, to support the program.

d. Establishes the DoD ISWM Working Group to recommend ISWM policy and program improvements. Section 5 provides details on the DoD ISWM Working Group functions.

e. Communicates ISWM policy and guidance to DoD employees, military personnel, and contractors and posts it on appropriate DoD websites to inform the public.

2.2. DIRECTOR, DEFENSE LOGISTICS AGENCY (DLA). Under the authority, direction, and control of the USD(AT&L), the Director, DLA, oversees appropriate DLA Disposition Services in establishing a uniform control system and program to divert DoD excess property in accordance with Section 545 of Title 40, U.S.C. and Section 6 of this issuance.

2.3. UNDER SECRETARY OF DEFENSE (COMPTROLLER)/CHIEF FINANCIAL OFFICER, DEPARTMENT OF DEFENSE. The Under Secretary of Defense (Comptroller)/Chief Financial Officer, DoD:

a. Provides fiscal policies and guidance in order to plan, budget, and execute congressional direction and Office of Management and Budget requirements throughout DoD.

b. In accordance with Volumes 4, 11A, and 12 of DoD 7000.14-R, provides financial management policy regarding:

(1) Funding operations of a QRP.

(2) Use of the F3875 Budget Clearing Account (Suspense) for the deposit, collection, management, and dispersion of sales revenue in accordance with Chapter 1 of Volume 12 of DoD 7000.14-R.

- (3) Auditing financial records of a QRP.

2.4. DOD COMPONENT HEADS WITH SOLID WASTE MANAGEMENT RESPONSIBILITIES. The DoD Component heads with solid waste management responsibilities:

a. Require compliance with all applicable laws, including federal, State, interstate, and local solid waste management requirements in accordance with Sections 6961 and 6964 of Title 42, U.S.C., regulations, E.O.s, and this issuance at all appropriate organizational levels and facilities within their Components in accordance with DoDD 4715.1E, DoDI 4715.06, and Part 243 of Title 40, CFR. Overseas installations will meet applicable requirements of the FGS or the OEBGD.

b. Plan, program, and budget resources necessary to establish, execute, monitor, and maintain ISWM programs consistent with this instruction and other DoD guidance and fiscal policy.

c. Comply with all demilitarization (DEMIL) and trade security control requirements in accordance with DoDI 2030.08 and DoD 4160.28-M.

d. Comply with the requirements established in Section 2577 of Title 10, U.S.C.; Part 172 of Title 32, CFR; and Volumes 4, 11A, and 12 of DoD 7000.14-R regarding the disposition of proceeds from the collection and disposition of recyclable materials. Additional guidance is provided in Paragraph 4.3.

e. Require leadership commitment to ISWM implementation and operation.

f. Maximize source reduction and diversion opportunities to efficiently manage solid waste as outlined in the ISWM hierarchy in Paragraph 3.2.

g. Assign responsibility for ISWM operational and support functions within their Components. Establish management controls to correct program weaknesses.

h. Assess efficiencies gained from aligning or partnering with other installations or DoD entities.

i. Designate a DoD Component representative(s) to participate in the DoD ISWM Working Group.

j. Develop DoD Component ISWM instructions, guidance, and procedures to support this issuance.

k. Develop and implement ISWM goals, objectives, and targets to support DoD goals.

l. Provide additional DoD Component policy and guidance for the establishment of installation QRPs as needed and consistent with this issuance. The efforts associated with the

collection, processing, and sales of recyclable commodities is in Part 172, Appendix A of Title 32, CFR.

m. Prohibit QRPs from recycling QRP-excluded materials in accordance with DoDI 2030.08, DoD 4160.28-M, DoD Manual (DoDM) 4160.21, Part 121 of Title 22, CFR, and Paragraph 4.5. of this issuance. Additional solid waste diversion guidance is provided in Table 1.

n. Report data to the ASD(EI&E), at least annually, to support progress towards DoD solid waste diversion goals and metrics as part of the environmental compliance programs and strategic sustainability performance plan data requirements. As a minimum, include solid waste measures of merit listed in Appendix 3A.

o. Require all government tenant organizations (including Defense Commissary Agency facilities and military exchanges) to participate in or provide data to support the installation's ISWM program.

p. Encourage and support innovative expansion of diversion programs.

q. Conduct internal compliance assessments yearly and external compliance assessments every three years at major installations. Assessments will include audits of existing QRP financial records.

r. Require that all inter-service support agreements specify participation and reporting to the installation ISWM program.

s. Require that solid waste management contracts specify that contractors maximize waste reduction and diversion, and fully participate in installation ISWM programs, including requirements for solid waste tracking and reporting.

t. Provide ISWM program managers and QRP managers with appropriate environmental and safety training and education programs. See Paragraph 4.6. for suggested training opportunities.

u. Review and approve, if appropriate, any QRP negotiated disposals with an estimated fair market value in excess of \$15,000. In advance of sale, provide Congress notification in accordance with Section 545(e) of Title 40, U.S.C.

2.5. SECRETARY OF THE ARMY. In addition to the responsibilities in Paragraph 2.4., the Secretary of the Army:

a. May carry out a program to sell recyclable munitions materials resulting from the DEMIL of conventional military munitions pursuant to Section 4690 of Title 10, U.S.C., without regard to Sections 541 through 555 of Chapter 5 of Title 40, U.S.C.

b. Uses any proceeds from that program in accordance with Section 4690 of Title 10, U.S.C.

SECTION 3: ISWM PROCEDURES

3.1. ISWM BACKGROUND.

a. DoD installations face multiple sustainability challenges regarding solid waste management. Landfills, both on and off installations, are reaching capacity, disposal costs are escalating, and stricter solid waste diversion and disposal regulations are being developed at all levels of government. To more effectively address these challenges, DoD employs the ISWM approach to improve efficiency and foster increased diversion of materials from the solid waste stream.

b. The ISWM program identifies relevant requirements (e.g., applicable laws, regulations, E.O.s, DoD diversion goals), followed by characterization of the current solid waste stream and waste management practices.

(1) Installation ISWM program managers then develop options for diversion or disposal, and associated costs and cost avoidance. This allows them to make systematic diversion or disposal decisions based on a more refined environmental management hierarchy, in keeping with DoD goals to efficiently increase recovery of useful materials.

(2) The ISWM program manager coordinates development and implementation of the ISWM program and plan with the QRP manager (where established), EMS management representative, and facility department responsible for reporting DoD ISWM metrics.

(3) Once implemented, ISWM practices are tracked on a regular basis so that adjustments can be made for a sustainable program.

3.2. ISWM HIERARCHY. ISWM employs a hierarchy of approaches and technologies for managing materials to maximize resource conservation and protect the environment. Generally, the higher in the hierarchy the technology or process, the more benefits gained in efficiencies, retained economic value, and reduction in long-term liability. From most to least preferred, the ISWM hierarchy, is:

- a. Source reduction.
- b. Sustainable procurement of goods and services.
- c. Reuse of materials.
- d. Donation.
- e. Recycling.
- f. Composting and mulching.
- g. Waste to energy recovery.

- h. Incineration.
- i. Landfilling.

3.3. DEVELOPING AN ISWM PLAN. Each installation generating more than 1 ton of solid waste per day (based on annual average) will develop, maintain, and annually review and update their ISWM plan. At a minimum, the ISWM plan includes:

- a. Identification of applicable federal, State, interstate, and local laws and regulations, E.O.s, and DoD and DoD Component policy regarding recycling, management, documentation, and disposal of solid waste to determine recycling and diversion requirements or goals. ISWM plans for overseas installations also include applicable international agreements and FGS or OEBDG requirements.
- b. Results of a solid waste characterization study to define the basis for the installation diversion goal. The ISWM program must make every effort possible to capture data from all sources of solid waste diversion and disposal.
- c. An analysis of existing solid waste management practices, including C&D debris diversion, for compliance and cost effectiveness. Table 1 provides guidance on material to consider for diversion and whether they are eligible for meeting the DoD ISWM diversion metric.
- d. Establishment of installation-level ISWM goals that reflect DoD goals.
- e. An ISWM organizational structure with associated responsibilities.
- f. Economic feasibility analysis of potential diversion opportunities to determine if diversion can create a positive economic benefit. If there is no net increase in cost, first preference should be given to the most environmentally preferable alternatives. There may be an opportunity to add commodities to the QRP or divert commodities through other methods (reuse, donation, recycling, or composting). The economic feasibility analysis should be based on current industry and market research.
- g. Procedures to meet recordkeeping and reporting requirements.
- h. Methods of outreach, promotion, and education to installation personnel, tenants, and contractors.
- i. Procedures, techniques, and practices to sustain compliance, facilitate program improvement, and meet prescribed goals.

Table 1. Materials Disposition and Diversion Eligibility Guidance

| # | ITEM | QRP ELIGIBLE | DLA DISPOSITION SERVICES ELIGIBLE | DIVERSION METRIC ELIGIBLE | NOTES |
|----|---|--------------|-----------------------------------|---------------------------|---|
| 1 | High-grade office paper | Yes | Yes | Yes | |
| 2 | Mixed office paper | Yes | Yes | Yes | |
| 3 | Newspaper print | Yes | Yes | Yes | |
| 4 | Corrugated cardboard | Yes | Yes | Yes | |
| 5 | Corrugated cardboard generated by commissaries or exchanges | Yes* | Yes | Yes | *QRP eligible only if a memorandum of understanding (MOU) is in effect with the local commissary or exchange stating they are donating the cardboard and any sales proceeds to the QRP. QRPs cannot return proceeds to commissaries or exchanges. |
| 6 | Plastics (recycling codes 1 - 7) | Yes | Yes | Yes | |
| 7 | Glass | Yes | Yes | Yes | |
| 8 | Aluminum and other metal cans | Yes | Yes | Yes | |
| 9 | Ferrous and non-ferrous scrap metal | Yes | Yes | Yes | From other activities. |
| 10 | Scrap metal from DEMIL of ships, aircraft, or weapons | No | Yes | No | |
| 11 | Scrap metal generated from activities supported by working capital funds (WCFs) | No | Yes | Yes | |
| 12 | Unserviceable appliances in scrap condition | Yes | Yes | Yes | Refrigerants must be recovered from refrigerators and air conditioner units before sale. Chlorofluorocarbon refrigerants should be turned into the DLA Ozone Depleting Substance Reserve. |
| 13 | Expended small arms cartridge casings (ESACCs) .50 caliber (12.7 (millimeter (mm)) and smaller | Yes | Yes | Yes | Options: (1) QRP must deform casings before direct sale, or (2) turn in to DLA Disposition Services with properly documented DD Form 1348-1A ¹ to receive sales proceeds. |
| 14 | Expended casings larger than .50 caliber (12.7 mm) | No | Yes | Yes | Requires safety inspections and DEMIL (Code G items). |
| 15 | Mixed metal range gleanings | Yes | Yes | Yes | |
| 16 | Ammunition cans and boxes; scrap condition, unusable or unserviceable .50 caliber (12.7 mm) and smaller | Yes | Yes | Yes | |
| 17 | Ammunition cans and boxes; serviceable for intended use | No | Yes | Yes | |
| 18 | Precious-metal bearing scrap | No | Yes | No | |
| 19 | Wooden pallets; unusable or unserviceable | Yes | No | Yes | |
| 20 | Wooden pallets; usable | No* | Yes | Yes | *QRP-eligible only with site-by-site DLA Disposition Services documented approval to determine as scrap. |
| 21 | Scrap wood | Yes | Yes | Yes | |
| 22 | Landscape trimmings | Yes | Yes | Yes* | *Grass clippings left in place is waste avoidance and not eligible for diversion credit. If collected and composted, include as diversion. |
| 23 | Food waste | Yes | No | Yes | |

Table 1. Materials Disposition and Diversion Eligibility Guidance, Continued

| # | ITEM | QRP ELIGIBLE | DLA DISPOSITION SERVICES ELIGIBLE | DIVERSION METRIC ELIGIBLE | NOTES |
|----|---|--------------|-----------------------------------|---------------------------|---|
| 24 | Excess food, donated | No | No | Yes | |
| 25 | Scrap furniture; broken, non-repairable, unusable, or unserviceable | Yes* | Yes | Yes | *QRP must sell as scrap metal, wood, or textile; cannot sell as usable furniture item. QRP must retain on file DLA Disposition Services abandonment or destruction certification. |
| 26 | Used furniture | No | Yes | Yes | |
| 27 | Uncontaminated rags and textiles | Yes | Yes | Yes | |
| 28 | Cooking oil or grease | Yes | Yes | Yes* | *If used for waste-to-energy purposes, it is disposal, not diversion. |
| 29 | Used vehicle oil; non-hazardous (NH) | Yes | Yes | Yes* | *If used for waste-to-energy purposes, it is disposal, not diversion. |
| 30 | Used vehicle oil; Resource Conservation and Recovery Act hazardous | No | Yes | No | |
| 31 | Antifreeze; NH ethylene glycol-based | Yes | Yes | Yes | |
| 32 | Fuel sources | No | Yes | No | As defined in Section 2922e of Title 10, U.S.C. |
| 33 | Unopened containers of solvents, paints, or oil including expired and NH items | No | Yes | No | |
| 34 | Used tires; automotive and light truck | Yes | Yes | Yes* | *If used for waste-to-energy purposes, it is disposal, not diversion. |
| 35 | Used tires; aircraft | No | Yes | Yes* | *If recycled (not burned for waste-to-energy), it is considered diversion. |
| 36 | Fluorescent bulbs | Yes | Yes | No* | *Regulated as universal waste under federal regulations. |
| 37 | Compact fluorescent bulbs | Yes | Yes | No* | *Regulated as universal waste under federal regulations. |
| 38 | Lead-acid batteries | Yes | Yes | No* | *Regulated as universal waste under federal regulations. |
| 39 | Government-purchased cell phone batteries (lithium-ion (rechargeable)) | No | Yes | No* | *Regulated as universal waste under federal regulations. |
| 40 | Dry-cell batteries (includes: alkaline (non-rechargeable), carbon zinc (non-rechargeable), nickel cadmium (rechargeable), lithium (non-rechargeable), and lithium-ion (rechargeable)) | Yes* | Yes | Yes* | *If NH and non-universal waste. |
| 41 | Spent toner cartridges | Yes | Yes | Yes | |
| 42 | Government-purchased cell phones | No | Yes | No | |
| 43 | Materials from building or structure deconstruction (copper wiring, unpainted wood waste, intact building components such as doors and windows) | Yes | Yes* | Yes** | *DLA Disposition Services does not accept broken window or glass. **Reportable as disposed or diverted C&D debris. |

Table 1. Materials Disposition and Diversion Eligibility Guidance, Continued

| # | ITEM | QRP ELIGIBLE | DLA DISPOSITION SERVICES ELIGIBLE | DIVERSION METRIC ELIGIBLE | NOTES |
|---|---|--------------|-----------------------------------|---------------------------|--|
| 44 | Materials from road or runway deconstruction (asphalt, concrete, metal rebar) | Yes | No* | Yes** | *DLA Disposition Services accepts metal rebar only from road or runway debris. **Reportable as disposed or diverted C&D debris. |
| 45 | Government-purchased electronic components (includes information technology) | No | Yes | No | |
| 46 | Privately owned personal property; lost, abandoned, or unclaimed | No | Yes | No | |
| 47 | Privately owned personal property, donated for QRP disposal | Yes | No | No | |
| 48 | Nonappropriated fund (NAF) scrap or recyclables | Yes* | Yes | Yes* | *QRP eligible only when MOU with local commissary or exchange states the NAF is donating both the scrap items and sales revenue to the QRP. |
| 49 | Military family housing (MFH) recyclables | Yes | Yes | Yes | |
| 50 | Privatized MFH municipal solid waste | Yes* | No | Yes** | *Privatized MFH generated recyclables are QRP eligible, but not mandatory. QRP manager should review contract between privatized MFH management and the DoD Component for options to include reporting privatized MFH recyclables. **If QRP is processing privatized MFH recyclables and including them as an installation diversion, both disposal and diverted tonnages must be reported. |
| ¹ DD Form 1348-1A, "Issue Release/Receipt Document," is available at http://www.dtic.mil/whs/directives/forms/eforms/dd13481a.pdf . | | | | | |

3.4. IMPLEMENTING AN ISWM PROGRAM.

a. Diversion management options are based on:

- (1) Compliance with applicable laws and regulations.
- (2) Life-cycle cost comparisons of commodity options.
- (3) Effect on diversion rate.
- (4) Compliance with DoD diversion rate goals.
- (5) Support for installation sustainability goals.
- (6) Amount of material involved.
- (7) Extent of supporting infrastructure on and off installation, as applicable.
- (8) Effect on mission accomplishment.
- (9) Distance to necessary facilities.
- (10) Environmental impacts (e.g., greenhouse gas or other air emissions, land use, energy, water, and fuel consumption).
- (11) Any other relevant factors identified by DoD.

b. At a minimum, implementation will include:

- (1) Coordination among appropriate facility program managers, tenants, and contractors.
- (2) Review and update of support contracts, if applicable, to incorporate ISWM procedures and data reporting as defined in the ISWM plan.
- (3) Periodic reviews and adjustments of the ISWM programs, including QRPs, to keep current with fiscal and regulatory compliance requirements. Reviews and adjustments include evaluation of progress toward any diversion goals established by E.O.s, DoD plans, or DoD policy. ISWM diversion goals are integrated into environmental management system and environmental quality assessment audit programs.

APPENDIX 3A: ISWM MEASURES OF MERIT

3A.1. Use ISWM measures of merit to assess the overall health and trends of each installation's ISWM program and identify potential funding and other resource shortfalls. The goal is to establish an effective ISWM program that includes reduction of NH solid waste generation and maximized diversion. The measures of merit are:

- a. Per capita generation of solid waste (without C&D debris). Population is based on permanent installation personnel unless the installation can provide a more accurate number of personnel during the year.
- b. Diversion rate of NH solid waste (without C&D debris).
- c. Diversion rate of C&D debris.
- d. Economic benefit of NH solid waste diversion.

3A.2. Each installation generating more than 1 ton of solid waste per day (based on annual average) will report on metrics.

3A.3. As a minimum, to support the ASD(EI&E) environmental management review for ISWM, the DoD Components will report and track progress on the data elements in Table 2 as part of the environmental compliance program data requirements.

Table 2. ISWM Data Requirements

| DATA ELEMENTS | UNITS |
|--|---|
| Quantity of NH solid waste generated (excluding C&D debris) | tons |
| Quantity of NH solid waste diverted (excluding C&D debris) | tons |
| Diversion rate of NH solid waste (excluding C&D debris) | percentage |
| Quantity of C&D debris generated | tons |
| Quantity of C&D debris diverted | tons |
| Diversion rate of C&D debris | percentage |
| Installation population. | person(s) |
| Per capita generation of NH solid waste (excluding C&D debris) | pounds per person per day |
| Quantity of composted material | tons |
| Quantity of each of the following recyclable commodity groups: 1. ESACCs recycled through an installation QRP, 2. ESACCs recycled through DLA Disposition Services, and 3. All other scrap metal. | tons |
| Quantity of NH solid waste (excluding C&D debris) sent to waste-to-energy facilities | tons |
| Quantity of NH solid waste incinerated (excluding C&D debris and waste-to-energy facilities) | tons |
| Quantity of NH solid waste landfilled (NH and C&D debris) | tons |
| Potential disposition cost (PDC) if all waste (including C&D debris) were to be landfilled or incinerated rather than diverted | dollars in thousands (\$K) |
| Actual disposition cost (ADC) of ISWM | \$K |
| QRP annual gross sales proceeds | \$K |
| Economic benefit of ISWM diversion | \$K, derived from PDC minus ADC |
| QRP annual net sales proceeds | \$K, QRP gross proceeds minus expenses paid |
| QRP total sales proceeds expended for pollution abatement; energy conservation; occupational safety and health activities; morale, welfare, and recreation projects | \$K |

SECTION 4: QRP PROCEDURES

4.1. QRP REQUIREMENTS.

a. Installations may establish QRPs if it is economically beneficial to retain sales revenue from recycled materials. Before establishment of a QRP, the installation ISWM manager:

(1) Reviews existing commodities and conducts a market analysis to determine if a QRP is a viable option in accordance with Paragraph 4.4.

(2) Conducts an economic feasibility analysis for each recyclable commodity generated in accordance with Paragraph 4.4.

(3) Gets approval to establish a QRP through the appropriate chain of command.

b. The installation commanding officer:

(1) Designates, in writing, a QRP manager who will oversee the entire QRP operation, be responsible for the budget, account for all costs incurred and sales revenue received, and manage equipment and employees.

(2) Establishes a QRP committee and designates a chair.

(3) Establishes an appropriate process of approving QRP committee recommendations to include allocation of sales revenue received in accordance with Part 172 of Title 32, CFR.

(4) Designates, in writing, personnel authorized to conduct QRP direct sales and award sales agreements.

c. The QRP operates in compliance with this Instruction and:

(1) Section 2577 of Title 10, U.S.C.

(2) Sections 541 through 555 of Title 40, U.S.C.

(3) Part 172 of Title 32, CFR.

(4) Portions of Part 102-38 of Title 41, CFR that implement the following requirements of Section 545 of Title 40, U.S.C.:

(a) Public bids (e.g., 102-38.170 through 102-38.270).

(b) Negotiated disposal (e.g., 102-38.100 through 102.38.110).

(c) Negotiated sales at fixed price (e.g., 102-38.120 through 102-38.125).

(5) Any applicable federal or state solid waste management laws and regulations.

d. In accordance with Section 545 of Title 40, U.S.C., conducts public advertising for bids unless a negotiated disposal or negotiated sale at fixed price is authorized.

(1) Consults Part 102-38 of Title 41, CFR for public bid, negotiated disposal, and negotiated sales requirements.

(2) For negotiated disposal with an estimated fair market value in excess of \$15,000, receive advance approval by the DoD Component Head, who then provides advance Congressional notification in accordance with Section 545(e) of Title 40, U.S.C.

(3) The Congressional notification procedures at Section 102-38.115 of Title 41, CFR do not apply.

4.2. QRP OPERATIONS. The QRP manager:

a. Provides strategic focus, organizational design, oversight of performance measurement, and development towards continual improvement.

b. Develops and annually reviews a QRP business plan outlining the overall management of the installation QRP as part of the ISWM program as described in Section 3. At a minimum, the business plan should include:

(1) An introduction or executive summary.

(2) Mission, goals, and objectives.

(3) QRP history.

(4) Commodity market and economic feasibility analysis in accordance with Paragraph 4.4.

(5) Roles and responsibilities.

(6) Operations.

(7) Financial management.

(8) Records management.

(9) Education, awareness, and outreach programs.

c. Works with the ISWM program manager to identify, through host- or tenant-support agreements, all facilities and tenant organizations participating in the recycling program; facilitates placement of proper receptacles or bins for collection of recyclables; and coordinates with facility managers and tenant organizations to establish a pick-up schedule of recyclables.

d. Requires that all QRP personnel are adequately trained. Recommended courses for specific personnel are provided in Paragraph 4.6.

e. Helps the ISWM program manager conduct waste stream analyses and commodity market feasibility studies.

f. Strives to meet installation diversion goals with recyclable commodities that can make up a substantial percentage of the solid waste stream.

g. Recycles only QRP-eligible commodities such as those defined in Table 1. Excluded materials are defined in Table 3. Paragraph 4.5. provides additional guidance on excluded materials.

h. Establishes a single DoD Activity Address Code for the QRP with DLA Disposition Services to capture any sale proceeds or revenues of recyclable materials toward the QRP account.

i. Sells recyclable commodities by direct sales or consigns them to DLA Disposition Services for sale. QRPs may sell universal waste subject to oversight by installation environmental personnel.

j. Processes ESACCs and unrecognizable metal gleaned from ranges (e.g., munitions, fragments, range-related debris) in accordance with Paragraph 4.5. and the June 23, 2011 Office of the USD(AT&L) Memorandum issued pursuant to Section 346 of Public Law (PL) 111-383.

k. Outside the United States, directs that disposition of recyclable commodities, derived from goods that have been imported duty-free, is accomplished consistent with the provisions contained in FGSs, excess or surplus property agreements, other international agreements with host nations, or the OEBGD.

l. Monitors and reconciles DLA Disposition Services approved payments and Defense Finance and Accounting Service (DFAS) disbursements to confirm that appropriate revenue is received.

m. Supports the installation diversion program so that QRP continuation and expansion enables receipt of appropriate funds and credit for QRP-eligible commodity sales.

n. Coordinates with appropriate environment, safety, and occupational health (ESOH) compliance personnel on all aspects of environmental protection related to the QRP. Specifics include all matters that affect solid and hazardous waste management including universal waste, general environmental compliance, and permit compliance and reporting.

o. Requires that supporting documentation (including financial statements, necessary licenses, and training to operate equipment and vehicles) are securely maintained for 6 years.

p. Educates installation personnel on identification of recyclable materials, source segregation, and turn-in of QRP-eligible commodities.

q. Helps the ISWM program manager with recordkeeping and reporting activities, including reporting the solid waste metrics data as required.

- r. Directs that appropriate management controls are in place for safe handling of recyclable commodities in an environmentally sound manner.
- s. Monitors and reports the overall financial performance of the QRP to the QRP committee and installation commanding officer.
 - (1) Maintains a QRP fiscal year (FY) budget based on financial statements including historical cost and benefit analysis, annual projected cost and benefit analysis, and 3-year projected cost and benefit analysis.
 - (2) Submits an approved QRP FY budget to the installation comptroller and appropriate personnel.
- t. Verifies an F3875 Budget Clearing Account (Suspense) for temporary collection, deposits, management, and dispersion of sales revenues. Reconciles the F3875 account at least quarterly for revenue and expense transactions.
- u. Participates in annual audits to confirm QRP accountability.
 - (1) Consults with legal counsel to evaluate fiscal and regulatory compliance with applicable laws and regulations, E.O.s, and DoD policy.
 - (2) Reviews financial records including the costs and proceeds from the recycling sales program, and the cost avoidance resulting from recycling and diversion.
 - (3) Briefs results of these audits to the installation commanding officer where QRPs are operated.
- v. Requires that the QRP complies with environmental policy, guidance, resources, and oversight regarding material potentially presenting an explosive hazard (MPPEH) and material documented as safe (MDAS) in accordance with DoDI 4140.62 and Paragraph 4.5 of this issuance.
- w. Solicits full and effective involvement of the installation commanding officer along with staff and management of all installation organizations. Investigates complaints and reports to the installation commanding officer or designated representative.
- x. In advance of any negotiated disposal without a public bid process, confirms negotiated sales estimated at \$15,000 or greater are approved by the DoD Component head in accordance with Section 545 of Title 40, U.S.C.

4.3. QRP FINANCIAL MANAGEMENT.

a. Sales Management. The QRP manager conducts the sale of recyclable commodities in accordance with Section 2577 of Title 10, U.S.C.; Part 172 of Title 32, CFR; Sections 541-555 of Title 40, U.S.C.; and DoD 7000.14-R. The installation QRP manager maintains sales,

financial, and operational records and periodically reconciles them. Financial records and information required to support effective program management and audit requirements are:

(1) **Records of Sale.** Maintain records of QRP direct sales, DLA Disposition Services Reimbursement Report, and DD Form 1348-1A.

(a) Direct sales records contain item description, sale price, sale date, payment date, weight of scrap sold, list of bidders, and buyer.

(b) DLA Disposition Services Reimbursement Reports contain item description, sale price, payment date, and weight of scrap sold.

(2) **QRP Costs.** Retain expense records for QRP operation and overhead costs. QRP records on operating costs may include purchase of equipment, maintenance, depreciation, program operation and expansion, transportation costs (e.g., collection and transfer to point of sale), labor costs, training, publicity, and overhead for processing recyclable commodities. Costs are discussed further in Paragraph 4.3.d.

(3) **Cost Effectiveness.** Measure the annual QRP cost effectiveness using this equation:
$$\text{Cost Effectiveness} = \text{Revenue from Sale of Recyclable Materials} + \text{Cost Avoidance} - \text{Costs of QRP}.$$

(4) **Cost Avoidance.** Estimate cost avoidance by determining the weight or volume of the material diverted from the waste stream and calculating the labor, prorated hauling costs, maintenance costs, landfill tipping fee (or the installation's landfill operating costs), and any other disposal charges that would have been incurred in the absence of waste prevention and recycling. QRPs will not be reimbursed directly for cost avoidance, but cost avoidance will be incorporated in calculations to determine QRP cost effectiveness.

(5) **Sales Proceeds Distributions.** Retain allocation records of sales proceeds distributions to authorized ESOH projects and the morale, welfare, and recreation program in accordance with Paragraph 4.3.c.(3)(a).

b. Types of Sales. QRPs may receive sales revenue through:

(1) **Direct Sales.** Any installation operating an authorized QRP may conduct direct sales of QRP-eligible commodities in accordance with Section 2577 of Title 10, U.S.C.; Part 172 of Title 32, CFR; Section 545 of Title 40, U.S.C.; DoD 7000.14-R; and DoDM 4160.21.

(2) **DLA Disposition Services Sales.** The QRP manager:

(a) Arranges for recyclable commodity sales at the discretion of DLA Disposition Services. Sales can be arranged through DLA Disposition Services either by transporting materials to a DLA Disposition Services site or by appropriately storing and documenting materials at the installation and arranging for an in-place DLA sales contract.

(b) Contacts the local DLA Disposition Services disposal service representative to obtain procedures on how to sell recyclable commodities through DLA Disposition Services.

(c) Provides a letter of authorization to the DLA Disposition Services site or office point of contact that includes:

1. QRP-designated line of accounting.
2. All DoD activity address codes associated with one QRP line of accounting. There is only one QRP DoD Activity Address Code stated in the letter of authorization.
3. Designee names, complete addresses, phone numbers, and digital signatures.
4. Signature from the installation commanding officer, QRP manager, or resource and budget personnel.

(d) Keeps copies of the letter on file and provides them to the DLA Disposition Services Headquarters QRP point of contact and the installation finance office.

1. Reissues a new letter with any information change.
2. Efficiently validates the financial information to avoid delay in payment.

(3) Sales Through Contractors or Partners. The installation may use a contractor or partner, with the exclusion of facility demolition contractors, to operate the QRP.

(a) The QRP manager must deposit checks received from recyclable commodities sales by a contractor into the F3875 Budget Clearing Account (Suspense).

(b) The QRP manager works with the installation contracting office to require that the contract governing QRP operations contains language specifying the installation receives recyclable commodity sales revenue.

(c) Contracts will clearly state that the QRP contractor may not offset contract cost or invoice based on recyclable commodity sales revenue.

(d) Submittal of all commodity sales receipts to the government must be included in the contract along with the appropriate timeline (e.g., monthly, quarterly).

c. Sales Revenue Management. The QRP manager is responsible for the proper management of recyclable commodity sales revenue. The QRP manager may arrange for the sale of recyclable commodities or accept sales revenue, but should not be involved in both functions. The QRP committee should designate, in writing, the QRP manager's responsibilities for arranging sales and managing generated sales revenue. Management of sales revenue includes:

(1) QRP F3875 Budget Clearing Account (Suspense). The QRP manager:

(a) Deposits recyclable commodity sales revenue promptly upon receipt into the F3875 Budget Clearing Account.

(b) Confirms there is a clear, documented accounting that may be verified independently to require that sales revenues are properly recorded and credited, especially since the F3875 account can receive funds from other sources. Funds cannot be obligated or expended from the F3875 account and balances must be transferred to the proper account in a timely manner.

1. The fiscal station and complete installation name are necessary to document that proper credit is given for the deposit.

2. A copy of the DD Form 1131, “Cash Collection Voucher,” available at <http://www.dtic.mil/whs/directives/forms/eforms/dd1131.pdf>, should be sent to the DFAS to establish a separate record of sales revenues.

(c) With the installation comptroller, reconciles the sales revenues accounting for each quarter.

(d) Works with DFAS for account reconciling and making deposits with copies available to the appropriate installation resource and financial managers.

(2) Forms of Payment.

(a) QRPs must adopt a payment policy that protects the government against fraud.

(b) Acceptable forms of recyclable commodity direct sales payment are a bank draft, cashier’s check, certified check, traveler’s check, or postal or telegraphic money order.

(c) Personal or company check and credit card payment may be accepted at the discretion of the installation comptroller. Due to risk of compromise and lack of an audit trail, cash payments are prohibited.

(d) Checks received should be made payable to the Department of the Treasury, not the QRP manager or NAF account.

(e) Document all checks and money orders on DD Form 1131 for transfer to DFAS and deposit into the F3875 Budget Clearing Account (Suspense).

(f) Electronic funds transfer consistent with installation comptroller requirements.

(3) Net Revenues. QRP sales revenues are first used to cover QRP operating and program costs and reimburse QRP use of installation operation and maintenance (O&M) funds in accordance with Section 2577 of Title 10, U.S.C.; Part 172 of Title 32, CFR; and Chapter 5 of Volume 11A of DoD 7000.14-R.

(a) If after such funds are credited and a balance remains available to the installation, not more than 50 percent of that balance may be used at the installation for projects for pollution abatement, pollution prevention, energy conservation, alternative-fueled vehicle infrastructure support, and occupational safety and health activities.

1. A project may not be carried out under this authority for an amount greater than 50 percent of the amount established by law as the maximum amount for a minor construction project.

2. Any remaining proceeds may be transferred to the non-appropriated MWR account of the installation for any morale or welfare activity programs that are in accordance with applicable DoD Component MWR regulations or guidance.

(b) The QRP committee recommends how to allocate net proceeds. The installation commanding officer (or regional commander) establishes the process for making the final decision. The installation comptroller's office confirms that projects considered for local funding with recycling proceeds are not included in a normal military construction program.

(c) Any unused QRP balance up to \$2 million is available until expended (i.e., may be carried over into subsequent FYs) subject to a recurring annual provision in applicable appropriation law. This provision must be confirmed annually stating that it has been extended and enacted. For any revenues carried over into a new FY, the restrictions specified in Paragraphs 4.3.c.(3) and 4.3.c.(3)(a) apply. If the balance available to the installation at the end of any FY is in excess of \$2 million, the amount of that excess will be transferred into the Department of the Treasury as miscellaneous receipts.

d. Costs of Operations, Maintenance, and Overhead for Processing Recyclable Materials.

(1) **Labor.** In some cases, labor associated with operation of the QRP can be reimbursed with QRP revenue.

(a) In accordance with DoD 7000.14-R, the QRP may not reimburse the cost of direct civilian labor for which funds have been appropriated.

(b) Non-appropriated labor costs associated with operating, maintaining, and processing recyclables may be eligible for reimbursement from QRP revenues.

(c) Installations must consult with their DoD Component guidance on reimbursement for labor costs, and coordinate through the appropriate legal office providing overall support for operation of the installation QRP program.

(2) **Start Up.** QRP start-up costs are budgeted and funded through the normal appropriated fund budgeting process. These costs are not reimbursable.

(3) **Collection, Containers, and Equipment.** Installation O&M funding can be used for containers that collect recyclables and any equipment necessary to collect divertible materials for transport to a processing point. QRP sales revenue reimburses O&M accounts for those costs identified as QRP operations (e.g., using a contract line item number applicable to QRP activities).

(4) **Recycling Equipment.** QRP sales revenue funds QRP equipment maintenance and repair costs, leased equipment costs, and equipment used exclusively at the QRP process location

(e.g., balers and forklifts). Acquisition of new or replacement equipment related only to recycling of solid waste, and the construction of holding bins, sorting platforms, or other recycling facility improvements are QRP costs. General building maintenance and renovations are a facility O&M expense.

(5) **Redistributed Equipment.** QRPs may obtain recycling equipment through DLA Disposition Services at no cost through redistribution. However, QRPs are responsible for any expense required to relocate that equipment.

(6) **Transportation.** Transportation and disposal of recyclables on or off the installation are funded by the installation O&M. QRP costs of operations can include pick up and movement of materials to the QRP. QRP sales revenue reimburses O&M accounts for those costs identified as QRP operations (e.g., separate line item for transportation contract).

(7) **Other.** Sales revenues can be used for courses, conferences, training, and equipment for QRP personnel. Revenues can also fund procurement of equipment for the QRP (e.g., computers).

e. **Recovery of QRP Costs.** Section 2577 of Title 10, U.S.C. requires installations to use recyclable commodity sales proceeds to cover QRP costs and reimburse installation O&M costs for QRP expenses. The QRP manager should prepare an FY operating budget to document estimated QRP income and expenses. The QRP manager must maintain accurate, organized, and detailed records to confirm that all QRP costs are covered before proceeds are used for other purposes. Good records also provide a tool for conducting market analysis and assist QRP managers in determining operational efficiencies.

f. **Monitoring and Review.** Each DoD Component must require that QRPs are operating within the requirements of this issuance.

g. **Outsourcing Opportunities.** QRPs may outsource all or part of their operations based on a documented decision matrix.

4.4. COMMODITY MARKET AND ECONOMIC FEASIBILITY ANALYSIS.

a. ISWM program managers and QRP managers perform market research for current and potential commodities for QRP-eligible recycling, donation (through DLA Disposition Services), composting, or other diversion opportunities. See Table 1 for guidance.

b. Commodities required for recycling by applicable federal, State, interstate, or local laws and regulations are not subject to economic feasibility analysis because recycling is mandatory. Sections 246.200-1 (high-grade paper), 246.201-1 (newspaper), and 246.202-1 (waste corrugated containers) of Title 40, CFR list two commodities required for the federal recycling programs under certain conditions.

c. Market research and analysis identifies the most cost-effective recycling opportunities for these commodities. This process is recommended as part of the QRP business plan. QRP managers:

(1) In coordination with the ISWM program manager, estimate installation-wide generated weight and volume of each commodity, including tenant activities, even those that handle their own wastes.

(2) Search a commodity exchange index for regional and national market prices for current and potential recyclable commodity sales. Determine whether current local market prices for recycled commodities are comparable to the regional and national market prices, or historical prices and trends.

(3) Determine the availability of buyers or brokers. Search locally for recyclable commodity sales opportunities. Centralized or regional contracting authorities may also be available for direct sales. In addition, the regional DLA Disposition Services office may provide a sales service through their contracts. If no accessible buyer or broker exists for a specific recyclable commodity, document research and do not conduct economic feasibility analysis for that commodity. Revisit commodities at least annually for availability of buyers or brokers. If brokers or buyers exist:

(a) Determine buyer or broker requirements for material quantity (e.g., buyer or broker accepts no less than 1-ton lots per transaction) and packaging requirements (e.g., baled, loose, cubed).

(b) Conduct an economic feasibility analysis for each commodity to determine whether it is cost effective to add to the recyclable collection process. Proceeds from one commodity can offset the costs of recycling another commodity.

d. When recycling those commodities not required by law, the additional costs to the QRP must be less than or equal to the cost avoidance plus revenue from the item sale to be cost effective to recycle (i.e., $\text{Additional Cost to QRP} \leq \text{Cost Avoidance} + \text{Revenue}$). Cost avoidance for landfill disposal should reflect actual costs, including tipping fees. Cost avoidance is discussed in Paragraph 4.3.a.(4).

e. When implementation costs are involved (such as purchasing equipment, upfront labor, expanding facilities, and transportation and energy costs), determine the payback period on the initial investment. Calculate the payback period by dividing the implementation cost by the sum of the annual cost savings and annual revenue. The result will indicate the payback period in years. Decision makers must determine what constitutes an acceptable payback period.

f. The QRP manager should consult with the QRP committee and the ISWM program manager before beginning collections and entering into sales agreements.

4.5. EXCLUDED ITEMS.

a. Background. Excluded materials listed in Table 3 are items or materials that may not be recycled through a QRP, but may be diverted through other processes.

Table 3. QRP Excluded Materials

| EXCLUDED MATERIALS | EXCLUDED BY REFERENCE |
|---|---|
| Government-furnished material | Part 172 of Title 32, CFR |
| Precious metal bearing scrap | Part 172 of Title 32, CFR |
| Hazardous waste (including household hazardous waste) | DoDM 4160.21 |
| Ozone-depleting substances | DoDM 4160.21 |
| Electrical and electronic items and components (e.g., computers, monitors, cell phones, fax machines) | Part 172 of Title 32, CFR and DoDM 4160.21 |
| Unopened containers of oil, paints, or solvents | Part 172 of Title 32, CFR and DoDM 4160.21 |
| Fuels (uncontaminated and contaminated) | Section 2922 of Title 10, U.S.C. and DoDM 4160.21 |
| Material that can be sold (as is) as a usable item | Part 172 of Title 32, CFR |
| Material that can be reused by the government for its original purpose without special processing | Part 172 of Title 32, CFR and DoDM 4160.21 |
| Repairable items that may be used again for their original purposes or functions (e.g., used vehicles, vehicle or machine parts) | Part 172 of Title 32, CFR |
| Ships, aircraft, weapons, electrical components, and other material required to be demilitarized or mutilated | Part 172 of Title 32, CFR |
| Scrap resulting from DEMIL | DoDM 4160.21 |
| All munitions list items (MLI) and Commerce Control List items (CCLI), except ESACCs and mixed metals gleaned from firing range clearance that were originally purchased with resource management funds. Small arms and ESACCs are defined as .50 caliber (12.7 mm) and below. Only DEMIL Code A may be candidates for recycling. | DoD 4160.28-M and DoDM 4160.21 |
| MPPEH unless ESACC or range scrap metal certified as MDAS | DoDI 4140.62 |
| Types of surplus personal property whose sales proceeds must be deposited to accounts other than a QRP, such as WCF | Part 172 of Title 32, CFR; DoD 7000.14-R; and DoDM 4160.21 |
| Scrap generated from WCF activities | Part 172 of Title 32, CFR |
| Usable personal property purchased by WCF activities | Part 172 of Title 32, CFR |
| Property purchased with commissary surcharge funds | Part 172 of Title 32, CFR |
| Automatic data processing equipment owned by the General Services Administration | Part 172 of Title 32, CFR |
| Property purchased for the Military Assistance Program or purchased with Foreign Military Sales Administrative funds | Part 172 of Title 32, CFR |
| Coast Guard property | Part 172 of Title 32, CFR and DoDM 4160.21 |
| Property owned by NAF activities (unless donated) | Part 172 of Title 32, CFR |
| Lost, abandoned, or unclaimed privately owned personal property | Part 172 of Title 32, CFR; Section 52 of Title 40, U.S.C.; and DoDM 4160.21 |
| Property owned by a country or international organization | Part 172 of Title 32, CFR |
| Bones, fats, and meat trimmings generated by a commissary | Part 172 of Title 32, CFR |
| Other materials as specified in country-specific FGS or, where no FGS exist, the OEBGD (for overseas installations only) | DoDI 4715.05 |
| Printed circuit boards containing hazardous materials | DoDM 4160.21 |

b. MLI and CCLI. MLI and CCLI material, or residue resulting from DEMIL or mutilation, are not QRP eligible. The only exceptions to this are ESACCs and firing range scrap metal gleaned from ranges as discussed in Paragraphs 4.5.c.(1) and 4.5.c.(3). Excluded items are sometimes inadvertently discovered among the recyclable commodities processed by the QRP. QRP personnel who may encounter excluded items must be trained in accordance with Paragraph 4.6.

c. Exceptions.

(1) ESACCs. ESACCs (.50 caliber (12.7 mm) and smaller) are MPPEH in accordance with DoDI 4140.62. Once this material is certified as MDAS, it can be transferred to a QRP. All other expended casings larger than .50 caliber (12.7 mm), even if certified safe, must be turned in to DLA Disposition Services. For MDAS transferred to the QRP, two sales options are available: direct QRP commodity sales and DLA Disposition Services sales.

(a) When conducting direct commodity sales through the QRP, in accordance with DoD 4160.28-M:

1. ESACCs must be properly crushed, shredded, granulated, or deformed using an ordnance deformer, hammer mill shredder, rotary blade granulator, or other approved methods.

2. All QRP ESACCs sales documentation must include a “dangerous property” clause waiving the government of liability from property purchased.

(b) For turn-in to DLA Disposition Services, ESACCs are not required to be crushed, shredded, granulated, or deformed.

(c) With both options, proper MDAS certification from appropriate certified individuals must be provided at turn-in.

(2) ESACCs and Overseas QRPs. Overseas ESACCs must first be MDAS certified and then properly crushed, shredded, granulated, deformed, or made unusable for its intended purpose in accordance with DoD 4160.28-M. QRPs may then conduct direct commodity sales or turn-in to DLA Disposition Services.

(3) Firing Range Scrap. Unrecognizable metal gleaned from ranges (e.g., munitions fragments, range-related debris), once MDAS certified, can be recycled by a QRP or the DLA Disposition Services similar to ESACCs.

(4) Plastic Target Recycling. Plastic must be separated from other metal range scrap, certified MDAS, and then recycled as scrap plastic.

4.6. TRAINING.

a. Background. Formal training for QRP operations, including direct QRP commodity sales and operation of equipment (static and mobile), is important for QRP personnel. Facilities

must maintain records or certificates of completed training. Paragraph 4.6.c. provides sources of training.

b. Requirements.

(1) Based on assigned duties, QRP personnel should complete a training program that includes:

(a) Applicable federal and State laws and regulations; DoD 4715.05-G or the FGS, as appropriate; and applicable E.O.s.

(b) Identification of recyclable commodities that can be processed through the QRP.

(c) Identification of all QRP-excluded materials (see Table 3).

(d) Direct sales.

(e) Annual ethics training.

(f) Personal protective equipment use, shock hazard, and safe working habits.

(2) QRP managers are also responsible for financial accounting and records management.

c. Recommended Formal Educational Programs.

(1) Air Force Institute of Technology course WENV 160 QRP Management (Interservice Environmental Education Review Board-approved for all DoD Components) at http://www.afit.edu/CE/Course_Desc.cfm?p=WENV%20160.

(2) Explosives safety training courses developed by the Military Services or U.S. Army Corps of Engineers such as these online training courses:

(a) “AMMO 45-DL Introduction to Ammunition” at http://dactces.org/index.php?option=com_content&view=article&id=137&Itemid=76

(b) “AMMO-63-DL U.S. Army Explosives Safety Familiarization” at http://www.dactces.org/index.php?option=com_content&view=article&id=141:ammo-63-dl&Itemid=76

(3) MPPEH training in the Ammunition Forum of the Acquisition Community Connection at <https://acc.dau.mil/CommunityBrowser.aspx?id=471742>

SECTION 5: DoD ISWM WORKING GROUP FUNCTIONS

The DoD ISWM Working Group:

- a. Is chaired by an ASD(EI&E) designated representative.
- b. Establishes working group operating principles.
- c. Develops, strategizes, and coordinates recycling and ISWM programs through the DoD Components.
- d. Identifies ISWM training opportunities for the DoD Components.
- e. Recommends policy, guidance, goals, and metrics to improve DoD sustainability in solid waste management programs.

SECTION 6: DLA DISPOSITION SERVICES FUNCTIONS

The DLA Disposition Services:

- a. Provides for screening of property in accordance with DoDM 4160.21 to promote the maximum reuse, transfer, and donation of excess personal property.
- b. Accepts QRP-recyclable commodities and reimburses installations from sales revenue within 30 days after sale in accordance with Part 172 of Title 32, CFR and Chapter 5 of Volume 11A of DoD 7000.14-R, and provides data in online reimbursable report.
- c. Accepts scrap and usable personal property purchased with WCF. Net proceeds, if any, are credited to applicable WCF in accordance with Title 10, U.S.C. and DoD 7000.14-R.
- d. Accepts QRP-excluded materials for disposition.
- e. Provides installation diversion data, as requested.
- f. Provides assistance to the Military Services regarding procedures for excess property that goes to a DLA Disposition Services office or vendors for handling surplus property that can be diverted through the QRP.
- g. Inspects and classifies government property, verifies its identity and quantity, determines the disposition condition code, and processes recyclable commodities.
- h. Makes the final determination on disposition of property in accordance with DoDI 2030.08, DoD 4160.28-M, and DoDM 4160.21.
- i. Explains turn-in procedures to QRP managers and advises installation QRP personnel in recycling scrap segregation practices.

GLOSSARY

G.1. ACRONYMS.

| | |
|-----------|---|
| \$K | dollars in thousands |
| ADC | actual disposition cost |
| ASD(EI&E) | Assistant Secretary of Defense for Energy, Installations, and Environment |
| BIS | Bureau of Industry and Security |
| C&D | construction and demolition |
| CCLI | Commerce Control List items |
| CFR | Code of Federal Regulations |
| DEMIL | demilitarization |
| DFAS | Defense Finance and Accounting Service |
| DLA | Defense Logistics Agency |
| DoDD | DoD directive |
| DoDI | DoD instruction |
| DoDM | DoD manual |
| E.O. | Executive order |
| ESACC | expended small arms cartridge case |
| ESOH | environment, safety, and occupational health |
| FGS | final governing standard |
| FY | fiscal year |
| GOCO | government-owned, contractor-operated |
| ISWM | integrated solid waste management |
| MDAS | material documented as safe |
| MFH | military family housing |
| MLI | munitions list item |

| | |
|-----------|---|
| mm | millimeter |
| MOU | memorandum of understanding |
| MPPEH | material potentially presenting an explosive hazard |
| MWR | morale, welfare, and recreation |
| NAF | nonappropriated fund |
| NH | non-hazardous |
| O&M | operation and maintenance |
| OEBGD | Overseas Environmental Baseline Guidance Document |
| PDC | potential disposition cost |
| PL | public law |
| QRP | qualified recycling program |
| U.S.C. | United States Code |
| USD(AT&L) | Under Secretary of Defense for Acquisition, Technology, and Logistics |
| WCF | working capital funds |

G.2. DEFINITIONS. Unless otherwise noted, these terms and their definitions are for the purposes of this issuance.

acquisition. Defined in the DoD Green Procurement Program Strategy.

C&D debris. Materials and debris generated during construction, renovation, demolition, or dismantling of all structures, buildings, pavements, and associated infrastructure that would normally go to a landfill.

CCLI. Item or material defined in Part 774 of Title 15, CFR.

The Department of Commerce's Bureau of Industry and Security (BIS) is responsible for implementing and enforcing the Export Administration Regulations, which regulate the export and re-export of many commercial items that also have a military or proliferation application.

The BIS maintains the Commerce Control List that is found in Supplement 1 to Part 774 of Title 15, CFR. The list contains all of the items subject to the export licensing authority of BIS.

Code G items. Defined in DoD 4160.28-M.

commodity. A waste or group of wastes, with economic value, that can be segregated from the solid waste stream and processed for recycling. Examples of commodities include high-grade office paper, newspaper, old corrugated cardboard, single stream mixed paper, mixed scrap metal, scrap aluminum, aluminum cans, ferrous scrap metal, glass, and plastic wastes.

Applicable federal, State, interstate, and local regulations may specify certain commodities that must be recycled.

Absent a requirement to recycle a particular commodity, an economic feasibility analysis is required to determine the cost effectiveness of recycling that commodity.

composting. The controlled biological decomposition process for managing the degradation of plant and organic waste to produce a useful product such as a mulch or soil conditioner.

cost avoidance. The cost of solid waste handling, hauling, and disposal that would have been incurred by the generating activity or installation in the absence of waste prevention and recycling. See also definition for “economic benefit of ISWM diversion.”

deconstruction. The careful dismantling of buildings or structures in order to salvage as much material as possible.

Tradition demolition practice is to simply knock buildings down, occasionally recycling the most valuable materials but disposing most of the material in the landfill.

Deconstruction practices allow for most materials to be salvaged and minimal material going to the landfill.

DEMIL. The act of eliminating the functional capabilities and inherent military design features from DoD personal property. Methods and degree range from removal and destruction of critical features to total destruction by cutting, crushing, shredding, melting, burning, etc. DEMIL is required to prevent property from being used for its originally intended purpose and to prevent the release of inherent design information that could be used against the United States. DEMIL applies to material in both serviceable and unserviceable conditions.

disposal. Defined in DoD 4160.28-M.

diversion. An activity that redirects materials that might otherwise be placed in the solid waste stream, excluding diversion to waste-to-energy facilities in accordance with E.O. 13693. Diversion includes reuse, donation, recycling, composting, or mulching.

donation. Property under the control of a Military Service or Defense Agency, including surplus personal property in WCFs established in accordance with Section 2208 of Title 10, U.S.C., or in similar management-type finds, that is given to charities, nonprofit organizations, funds, and other similar entities as defined in Enclosure 5 of Volume 1 of DoDM 4160.21.

economic benefit of ISWM diversion. The cost avoided by diverting materials rather than disposing of them. Economic benefit equals “PDC” minus “ADC.” When the collection and transportation costs for the diverted material are about the same whether or not they are diverted,

the economic benefit equals (diverted quantity x disposal tipping fee) - diversion cost + diversion proceeds. A positive economic benefit means that the cost to dispose of the diverted material is greater than the cost to divert the material.

ESACC. Cartridge case from small arms (i.e., ammunition without projectiles that contain explosives, other than tracers) that is .50 caliber (12.7 mm) and smaller, or for shotguns used in live-fire training or testing and collected after use during operations. ESACCs are sometimes referred to as “brass cartridges” or “fired cartridge cases.”

F3875 Budget Clearing Account. Defined in Chapter 9 of Volume 5 and Chapter 1 of Volume 12 of DoD 7000.14-R, the proceeds from the sale of recyclable materials will be deposited in an F3875 account in accordance with Section 172.5(f) of Title 32, CFR. Section 2577 of Title 10, U.S.C. limits the amount of funds that can be held at the end of any FY to \$2 million. Excess funds are transferred to miscellaneous receipts of the Department of the Treasury.

GOCO. A facility that is owned by the government and operated by a contractual civilian organization.

green procurement. The acquisition of green products and services as defined in the Department of Defense Green Procurement Program Strategy. Green products and services meet the requirements of one or more of the components of federal green procurement preference programs as defined in E.O. 13693; Sections 6002 through 6962 of Title 42, U.S.C.; Section 9002 of PL 107-171; Section 943 of PL 109-58; Sections 521 through 526 of PL 110-140; and any federal green procurement preference program implemented after the date of this issuance.

hazardous waste. Defined in Section 261.3 of Title 40, CFR.

installation. A base, camp, post, station, yard, center, homeport facility for any ship, or other activity under the jurisdiction of the Secretary of a Military Department or the DoD.

This includes any leased facility where a Military Department or DoD activity has real property maintenance requirements, GOCO installations, and stand-alone National Guard and Reserve Centers.

Such term does **not** include any facility used primarily for civil works, rivers, and harbors, projects, or flood control projects.

Installations outside the United States are defined in accordance with DoDI 4715.05.

Installations outside the United States do not include temporary, contingency operation, or deployment support facilities. Military Departments or DoD activities that are located within the confines of another are considered to be tenants. Tenants on installations should report through their host installation.

ISWM. A comprehensive approach to managing materials and NH solid waste (including C&D debris waste) that encompasses waste prevention, diversion, composting, and methods of disposal. ISWM determines the most cost-effective, energy-efficient, and least-polluting ways to

deal with the various segments of, and the items typically found in, an installation or facility solid waste stream.

major installation. Large and medium installations determined by the Military Service based on their end-of-year real property asset data submission installations table.

materiel. All items—including ships, tanks, self-propelled weapons, aircraft, etc., and related spares, repair parts, and support equipment, but excluding real property, installations, and utilities—necessary to equip, operate, maintain, and support military activities without distinction as to its application for administrative or combat purposes.

MDAS. Defined in DoDI 4140.62.

MLI. Defense articles, defense services, and related technology designated as defense-related by the Federal Government pursuant to Sections 2778 and 2794 of Title 22, U.S.C., also known as the “Arms Export Control Act of 1976.”

These articles fall under the export and temporary import jurisdiction of the Department of State.

The United States Munitions List is found in Part 121 of Title 22, CFR and Volume 2 of DoD 4160.28-M and is amended by rules published in the Federal Register.

MPPEH. Defined in DoDI 4140.62.

NAF. A fund that is not appropriated by Congress to incur obligations and make payments out of the Department of the Treasury.

NAFs come primarily from the sale of goods and services to DoD military and civilian personnel and their family members. These funds are used to support MWR, lodging, civilian welfare, post restaurant, and certain religious and educational programs.

NAFs are entitled to the same protection as funds appropriated by Congress and are used for the collective benefit of military personnel, their family members, and authorized civilians. These funds are separate from funds that are recorded in the books of the Department of the Treasury.

NH solid waste. Solid waste that does not meet the definition of hazardous waste.

personal property. Any DoD property, except real property (buildings and land). Excludes records of the Federal Government and naval vessels in accordance with Part 102-38 of Title 41, CFR.

procurement. The acquiring by contract with appropriated funds for supplies or services by and for the use of the Federal Government through purchase or lease, whether the supplies or services are already in existence or must be created, developed, demonstrated, and evaluated.

QRP. Pursuant to Section 2577 of Title 10, U.S.C., an organized operation that requires concerted efforts to divert or recover scrap or waste, as well as efforts to identify, segregate, and maintain the integrity of the recyclable materials in order to maintain or enhance their marketability. If the program is administered by a DoD Component, a QRP includes adherence to a control process providing accountability for all materials processed through program operations.

QRP committee. A committee established by the installation commander that makes recommendations regarding approval of QRP FY budget, capital expenditures for equipment and recycling infrastructure, and improvements and corrective actions based on financial and environmental compliance audits and internal monitoring and reviews, and provides recommendations regarding disposition of excess recycling funds, if any.

Membership includes, but is not limited to, the installation QRP manager, the installation executive officer, and representatives from the comptroller's office, installation major activities and units, facilities and public works, environmental, safety, and MWR.

The QRP committee may meet as often as required, but must meet at least annually.

QRP gross sales proceeds. Annual revenues that are generated by the QRP operation from direct sales and turn-ins from DLA. This does not include recycling revenues that do not go to the QRP, such as DEMIL material that does not qualify for the QRP.

QRP net proceeds. Revenue after QRP expenses are paid. This would be gross proceeds minus the costs on an annual basis.

recovered material. Waste materials and by-products that have been recovered or diverted from solid waste, not including those materials and by-products generated from, and commonly reused in, an original manufacturing process.

recyclable materials. Materials that can be recovered through various recycling processes.

recycling. The series of activities, including collection, separation, and processing, by which products or other materials are diverted from the solid waste stream for use in the form of raw materials in the manufacture of new products sold or distributed in commerce, or the reuse of such materials as substitutes for goods made of virgin materials, other than fuel.

reuse. The use of a product or material again for the same purpose, in its original form or with little enhancement or change.

salvage. Usable, salable items derived from buildings undergoing demolition or deconstruction, parts from vehicles, machinery, other equipment, or other components.

scrap. Defined in Volume 3 of DoDM 4160.21. DLA Disposition Services may declare a usable item to be scrap if it has no value other than its inherent material content.

small arms. Defined in Volume 1 of DoDM 4160.21.

solid waste. Garbage, refuse, sludge, and other discarded materials not excluded by federal law or regulations, as defined in Section 6903 of Title 42, U.S.C. and Section 261.2 of Title 40, CFR. Solid waste does not include materials that are hazardous waste.

source reduction. Defined in Section 13102 of Title 42, U.S.C.

trade security control. Policy and procedures designed to prevent the sale or shipment of U.S. Government materiel to any person, organization, or country whose interests are unfriendly or hostile to those of the United States as defined in DoDI 2030.08.

United States. The 50 States, the District of Columbia, the Commonwealths of Puerto Rico and the Northern Mariana Islands, American Samoa, Guam, Midway and Wake Islands, the U.S. Virgin Islands, any other territory or possession of the United States, and associated navigable waters, contiguous zones, and ocean waters of which the natural resources are under the exclusive management authority of the United States.

universal waste. Any of the following hazardous wastes that are subject to the universal waste requirements in Part 273 of Title 40, CFR: batteries, pesticides, mercury containing equipment (e.g., thermostats), and lamps. The regulations in Part 273 of Title 40, CFR are less stringent than those for hazardous waste at Parts 260 through 265 of Title 40, CFR to promote recycling in lieu of disposal. State-specific universal waste regulations may vary significantly from those in Part 273 of Title 40, CFR.

waste stream assessment. An evaluation that determines the amount of waste generated in the area to be managed, components of the waste stream, geographic location of generation of waste, seasonal fluctuations of all of the above, and existing capacity of all waste management methods and facilities.

waste to energy recovery. Conversion of waste materials into usable heat, electricity, or fuel through a variety of processes.

WCF. A revolving fund established pursuant to Section 2208 of Title 10, U.S.C. to finance inventories of supplies and certain industrial-type operations on a reimbursable basis.

WCF activities are allowed to charge their customers for services and supplies so that direct Congressional appropriations are not needed to finance their operations and to allow operation without FY limitation.

A WCF activity is intended to operate on a break-even basis over time; it neither makes a profit nor incurs a loss.

The Defense Business Operating Fund was a revolving fund that preceded the establishment of WCFs. Any reference to a Defense Business Operating Fund in legislation or other issuances will be interpreted as a reference to a WCF.

Typical WCF business operations include consumable spare parts and supplies, depot maintenance, storage and transportation of supplies, financial and accounting services, printing and publication services, commissaries, information services, and research and development.

REFERENCES

- Code of Federal Regulations, Title 15, Part 774
- Code of Federal Regulations, Title 22, Part 121
- Code of Federal Regulations, Title 32, Part 172
- Code of Federal Regulations, Title 40, Parts 260-265 or Part 273
- Code of Federal Regulations, Title 41, Part 102-38
- Deputy Secretary of Defense Memorandum, “Establishment of the Office of the Under Secretary of Defense for Research and Engineering and the Office of the Under Secretary of Defense for Acquisition and Sustainment,” July 13, 2018
- Deputy Under Secretary of Defense for Installations and Environment and the Director, Defense Procurement, Acquisition Policy and Strategic Sourcing, “Department of Defense Green Procurement Program Strategy,” November 2008¹
- DoD 4160.28-M, “Defense Demilitarization,” June 7, 2011
- DoD 4715.05-G, “Overseas Environmental Baseline Guidance Document,” May 1, 2007
- DoD 7000.14-R, “Department of Defense Financial Management Regulation (DoD FMRs),” current edition
- DoD 7000.14-R, Volume 4, “Department of Defense Financial Management Regulation (DoD FMRs): Accounting Policies,” current edition
- DoD 7000.14-R, Volume 5, “Department of Defense Financial Management Regulation (DoD FMRs): Disbursing Policy,” current edition
- DoD 7000.14-R, Volume 11A, “Department of Defense Financial Management Regulation (DoD FMRs): Reimbursable Operations Policy,” current edition
- DoD 7000.14-R, Volume 12, “Department of Defense Financial Management Regulation (DoD FMRs): Special Accounts, Funds and Programs,” current edition
- DoD Directive 4715.1E, “Environment, Safety, and Occupational Health (ESOH),” March 19, 2005
- DoD Directive 5134.01, “Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L))” December 9, 2005, as amended
- DoD Instruction 2030.08, “Implementation of Trade Security Controls (TSC) for Transfers of DoD Personal Property to Parties Outside DoD Control,” February 19, 2015
- DoD Instruction 4140.62, “Material Potentially Presenting an Explosive Hazard (MPPEH),” August 20, 2015
- DoD Instruction 4715.05, “Environmental Compliance at Installations Outside the United States,” November 1, 2013
- DoD Instruction 4715.06, “Environmental Compliance in the United States,” May 4, 2015
- DoD Manual 4160.21, “Defense Materiel Disposition Manual,” October 22, 2015

¹ Copies may be obtained from the Internet at <http://www.acq.osd.mil/dpap/cpic/cp/docs/USA001967-08-DPAP.pdf>

Executive Order 13693, “Planning for Federal Sustainability in the Next Decade,” March 19, 2015

Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics
Memorandum, “Department of Defense (DoD) Implementing Guidance for the Commercial Sale of Expended Small Arms Cartridge Cases (ESACC),” June 23, 2011

Public Law 107-171, Section 9002, “Farm Security and Rural Investment Act of 2002,” May 13, 2002

Public Law 109-58, Section 943, “Energy Policy Act of 2005,” August 8, 2005

Public Law 110-140, Sections 521 through 526, “Energy Independence and Security Act of 2007,” December 19, 2007

Public Law 111-383, Section 346, “National Defense Authorization Act for Fiscal Year 2011,” January 7, 2011

United States Code, Title 10, Section 2577

United States Code, Title 22, Sections 2778 and 2794 (also known as the “Arms Export Control Act of 1976”)

United States Code, Title 40, Sections 541-555

United States Code, Title 42, Sections 6961 and 6964