Evaluation Report

OFFICE OF THE INSPECTOR GENERAL

DIRECT SALES OF RECYCLABLE MATERIAL

Report No. 97-087 **February 4, 1997**

DEPARTMENT OF DEFENSE

Additional Copies

To obtain additional copies of this evaluation report, contact the Secondary Reports Distribution Unit of the Analysis, Planning, and Technical Support Directorate at (703) 604-8937 (DSN 664-8937) or FAX (703) 604-8932.

Suggestions for Future Evaluations

To suggest ideas for or to request future evaluations, contact the Planning and Coordination Branch of the Analysis, Planning, and Technical Support Directorate at (703) 604-8939 (DSN 664-8939) or FAX (703) 604-8932. Ideas and requests can also be mailed to:

OAIG-AUD (ATTN: APTS Audit Suggestions)
Inspector General, Department of Defense
400 Army Navy Drive (Room 801)
Arlington, Virginia 22202-2884

Defense Hotline

To report fraud, waste, or abuse, contact the Defense Hotline by calling (800) 424-9098; by sending an electronic message to Hotline@DODIG.OSD.MIL; or by writing the Defense Hotline, The Pentagon, Washington, D.C. 20301-1900. The identity of each writer and caller is fully protected.

Acronyms

DLA	Defense Logistics Agency
DRMS	Defense Reutilization and Marketing Service
DUSD	Deputy Under Secretary of Defense
MWR	Morale, Welfare, and Recreation
QRP	Qualified Recycling Program

INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
400 ARMY NAVY DRIVE
ARLINGTON, VIRGINIA 22202-2884

February 4, 1997

MEMORANDUM FOR DEPUTY UNDER SECRETARY OF DEFENSE
(ENVIRONMENTAL SECURITY)

SUBJECT: Report on the Evaluation of the Direct Sale of Recyclable Material
(Report No. 97-087)

We are providing this evaluation report for information and use. We considered management comments on a draft of this report in preparing the final report.

Comments on the draft report generally conformed to requirements of DoD Directive 7650.3 and left no unresolved issues. Therefore, no additional comments are required.

We appreciate the courtesies extended to the evaluation staff. Questions on the evaluation should be directed to Ms. Debra Murphy, Evaluation Program Director, at (703) 604-8762 (DSN 664-8762). See Appendix G for the report distribution. The evaluation team members are listed inside the back cover.

Robert J. Lieberman
Assistant Inspector General
for Auditing

Office of the Inspector General, DoD

Report No. 97-087 **February 4, 1997**
(Project No. 6LH-9019)

Evaluation of the Direct Sale of Recyclable Material

Executive Summary

Introduction. This evaluation was performed in response to a request made by the Deputy Under Secretary of Defense (Environmental Security) to examine a representative sample of installations having authority to sell recyclable materials that were purchased or procured with appropriated funds. United States Code, title 10, section 2577, on disposal of recycling materials provides the legislative basis for DoD to prescribe regulations for the sale of recyclable material. As of March 1996, Defense Logistics Agency records showed that 94 installations in DoD had been granted authority to conduct direct sales of recyclable materials. We visited 16 of the 94 installations that had been granted the authority. The installations visited had direct sales of about $1.5 million in FY 1995.

Evaluation Objectives. The primary evaluation objective was to determine whether DoD policy pertaining to the direct sale of recyclable material was being followed at DoD installations having that authority. We also reviewed the adequacy of the management control program as it applied to the stated objective.

Evaluation Results. DoD installations generally complied with existing policy regarding the conduct of direct sales; however, improved guidance and oversight were needed. The DoD Pollution Prevention Committee, a Defense Environmental Security Council committee, recently took steps to improve the guidance and oversight on direct sales. It formed a working group on recycling on which a member of the Inspector General, DoD serves. The working group is developing a Combined Services Qualified Recycling Program guide that includes specific information on the military installations' direct sale of recyclable material. The following specific conditions warrant management action.

o Improved guidance was needed to ensure that financial records were accurate and sales were properly conducted. Installation officials did not have accurate financial information concerning the revenues for direct sales on which to make program decisions. Additionally, they could not verify that awarded sales were based on competitive bids, or that a fair market price was received for recycled materials sold directly (Finding A).

o Installation officials did not consistently identify the reimbursable costs for recycling programs and did not consistently treat cost avoidances. Also, the costs needed to show the net benefits of adopting direct sales programs were not consistently identified and reported. As a result, decisionmakers within the Military Departments and the Defense Logistics Agency did not have sufficient information to ensure the accurate calculation of net proceeds and net benefits at installations, and to decide whether to permit their organizations to expand the direct sale of recyclable materials. In addition, installation officials did not have adequate cost information to decide on the most cost-effective method for conducting direct sales (Finding B).

o Officials at 10 of 16 installations visited had not considered or attempted to outsource Qualified Recycling Program functions to recycling contractors. As a result, the installation officials could not always demonstrate that the best value for the Government had been obtained by performing Qualified Recycling Program functions in-house. Further, installation officials at the 10 sites assumed sales and accounting responsibilities and costs that could have been transferred to a contractor (Finding C).

Implementing the recommendations will provide managers with more complete and accurate data on which to make good business decisions concerning the direct sale programs and will ensure that sales are properly awarded and Qualified Recycling Programs are cost-effective. However, we could not quantify the amount of the benefit from our recommendations because the extent of direct sales will depend on future management decisions about which installations will have the authority to conduct direct sales of recyclable material purchased with appropriated funds. The evaluation identified no material management control weaknesses.

Summary of Recommendations. We recommend that the Deputy Under Secretary of Defense (Environmental Security) issue guidance in the Combined Services Qualified Recycling Program guide to periodically reconcile sales and financial records, establish written procedures for the conduct of sales, and clearly define the treatment of costs and cost avoidances. In addition, we recommend that the Deputy Under Secretary of Defense (Environmental Security) change the appropriate DoD Instructions or supplementary guidance in the Combined Services Qualified Recycling Program guide to require that outsourcing opportunities be considered when Qualified Recycling Programs are established or modified to include direct sales authority, or when market conditions for recyclable material change.

Management Comments. The Deputy Under Secretary of Defense (Environmental Security) concurred with the recommendations, and indicated that additional guidance regarding the operation of direct sales programs will be included in the Combined Services Qualified Recycling Program Guide that is now under development. The guide is scheduled to be issued by the end of FY 1997. See Part I for a discussion of management comments and Part III for the complete text of management comments.

Table of Contents

Executive Summary i

Part I - Evaluation Results

Evaluation Background 2
Evaluation Objectives 3
Finding A. Financial Records and Sales 4
Finding B. Proceeds, Costs, and Benefits 10
Finding C. Outsourcing Qualified Recycling Program Functions 19

Part II - Additional Information

Appendix A. Evaluation Process
Scope 26
Methodology 26
Organizations and Individuals Visited or Contacted 27
Management Control Program 28
Appendix B. Prior Audits and Other Reviews 29
Appendix C. Other Matters of Interest 32
Appendix D. Acronyms Used in Tables and Key for Table 3 34
Appendix E. Fiscal Years 1995 and 1996 Gross Revenues 35
Appendix F. Market Prices for Selected Commodities 37
Appendix G. Report Distribution 38

Part III - Management Comments

Deputy Under Secretary of Defense (Environmental Security) Comments 42

Part I - Evaluation Results

Evaluation Background

Request for Evaluation. We performed this evaluation in response to a request forwarded by the Executive Director (Supply Management), Defense Logistics Agency (DLA) from the Deputy Under Secretary of Defense (DUSD) (Environmental Security). They requested that we review a representative sample of installations having authority to conduct direct sale of recyclable material purchased with appropriated funds to ensure that the installations followed the DUSD (Environmental Security) recycling policy in effect at the time of the request.

Legislation on Recycling. United States Code, title 10, section 2577 (10 U.S.C. 2577), "Disposal of Recyclable Materials," effective October 1, 1982, provides the legislative basis for the sale of recyclable material, such as paper and cardboard, at DoD installations. It states, "The Secretary of Defense shall prescribe regulations to provide for the sale of recyclable material held by a [M]ilitary [D]epartment or [D]efense agency and for the operation of recycling programs at military installations." Under the law, after program costs are covered, installations may use 50 percent of the net proceeds from the sale of recycling materials for various environmental or health and safety purposes, or the net proceeds may go towards morale, welfare, and recreation (MWR) programs. Whether installations conduct direct sales or not, Executive Order 12873, "Federal Acquisition, Recycling, and Waste Prevention," October 20, 1993, requires that each Executive agency initiate a program to promote cost-effective waste reduction and recycling of reusable materials in all of its facilities.

Federal and DoD Guidance. The DUSD (Environmental Security) implemented the provisions of 10 U.S.C. 2577 and the requirements of Executive Order 12873 through policy memorandums issued in August and September 1993. The DLA, through the Defense Reutilization and Marketing Service (DRMS) was the primary agency responsible for the sale of recyclable materials generated from an appropriated fund source. However, upon request and approval by the DLA, an installation was authorized to directly sell recyclable material. The policy memorandums were superseded by DoD Instruction 4715.4, "Pollution Prevention," June 18, 1996, which requires that the heads of the Military Departments, the Defense agencies, and the DoD field organizations establish cost-effective recycling programs and procedures that authorize installation commanders to sell recyclable material directly or consign them to the DRMS for sale, without DLA approval.

Direct Sale Revenues and Market Prices. Revenue and cost information on the direct sale of recyclable material is limited. Further, market prices for recyclable material are volatile. Central reporting of direct sale revenues and costs did not exist. Gross revenue for recyclable material sold directly and other Qualified Recycling Program (QRP) recyclable material sold through the

DRMS at 14 of the 16 installations we visited had comparable data (see Appendix E). The total direct sale and other QRP revenue for FY 1995 was $1.5 million and $2.1 million, respectively.

The number of installations in DoD with approval from DLA to conduct direct sale of appropriated funded recyclable material increased between 1995 and 1996, and is expected to increase even more. According to data from DLA, 37 installations had authority before July 1995, and by March 1996, the number of installations with authority increased to 94. While the number of installations with approval to directly sell recyclable material increased, the market prices for some recyclable materials that the 16 installations sold significantly decreased between April 1995 and July 1996 (see Appendix F).

Evaluation Objectives

The overall evaluation objective was to determine whether DoD policy pertaining to the direct sale of recyclable material was being followed at DoD installations having this authority. Specific objectives were to determine:

- o whether accountability and reporting procedures in the policy were being complied with,
- o whether items not permitted for direct sale were included in the program,
- o whether requirements for the distribution of proceeds were being met, and
- o whether direct sales resulted in anticipated benefits at the installations.

In addition to the stated objectives, we reviewed the direct sales program to identify best practices for establishing the most cost-effective programs. We also reviewed the management control program as applicable to the overall objective. Appendix A discusses the scope and methodology and the review of the management control program. Appendix B discusses prior audits and other reviews. Appendix C discusses the second specific objective on the types of items included in direct sales.

Finding A. Financial Records and Sales

Improved guidance was needed to ensure that financial records were accurate and sales were properly conducted. The condition occurred because the DUSD (Environmental Security) recycling policy and the DoD Components' implementing guidance did not state specifically how QRP managers should reconcile sales and financial records, and the proper procedures for sales estimated to be less than $15,000. As a result, installation officials did not have accurate financial information concerning the revenues for direct sales on which to make program decisions. In addition, they could not verify that awarded sales were based on competitive bids, or that a fair market price was received for recycled materials sold directly.

Policy Requirements

DoD policy on recycling was articulated in DUSD (Environmental Security) memorandums, "Policy for Recycling," August 18, 1993 and September 23, 1993. The DUSD (Environmental Security) recycling policy memorandums required that all DoD installations worldwide have, or be associated with, a QRP. A QRP is an organized operation that requires concerted efforts to divert or recover scrap or waste from the waste stream, as well as efforts to identify, segregate, and maintain the integrity of the recyclable materials to maintain or enhance the marketability of the materials. The program for the direct sale of recyclable material is a part of an installation's QRP. The DRMS was responsible for the sale of all recyclable materials generated from an appropriated fund source. However, upon request and approval by the DLA, an installation was authorized to directly sell recyclable material when:

o direct sale was expected to result in increased proceeds, net of costs, increased efficiency, or cost effectiveness or

o the sale of a material was expected to result in the direct return of a usable product containing that material.

The DUSD (Environmental Security) recycling policy also established basic requirements regarding the goals and objectives for the QRP, discussed accountability and reporting, defined recyclable materials, listed those materials that are specifically excluded from the QRP, and discussed the management of proceeds from the sale of recycled material. In addition, the policy required installations with QRPs to maintain records showing quantity and type of material recycled, and the amount and use of proceeds from the sale of recyclable material.

The provisions of the policy are restated in Army Regulations 200-1, "Environmental Protection and Enhancement," April 23, 1990 and 420-47, "Solid and Hazardous Waste Management," June 22, 1987. The policy was also restated in Chief of Naval Operations Instruction 5090.1B, "Environmental

and Natural Resources Program Manual," November 1, 1994, and Air Force Instruction 32-7080, "Pollution Prevention Program," dated May 12, 1994. The QRP policy also required that all sales of recyclable material be in accordance with the procedures in section 203 of the Federal Property and Administrative Services Act of 1949, codified in 40 U.S.C. 484, "Disposal of Surplus Property." The 40 U.S.C. 484 requires the use of competition and determination of fair and reasonable prices. Although not referenced in the DUSD (Environmental Security) recycling policy memorandum, that section of the law was implemented in the Federal Property Management Regulations, 41 Code of Federal Regulations, Part 101-45, "Sale, Abandonment, or Destruction of Personal Property."

Maintaining Records and Sales Procedures

Accountability and Reporting Records. Financial records at five installations were not accurate, because improved DoD guidance was needed in this area. The 16 installations we visited maintained sales records that conformed to DUSD (Environmental Security) policy. All installations maintained sales records and source documents that showed the quantity, types, and proceeds from the direct sale of recyclable material.

We tested records to ensure that gross revenues shown on financial records reconciled with total gross revenues shown in sales records. Gross revenues on financial records at 5 of 16 installations were inaccurate. The discrepancies ranged from $10,225 to $29,859. Inaccurate and late postings resulted in one installation understating the FY 1995 direct sale revenue by $16,583 (31 percent). Another installation overstated the revenue for FY 1995 by $29,859 (8 percent). Table 1 identifies the five installations that maintained inaccurate financial records. In addition, the table shows that none of the 16 installations had written procedures for reconciling financial and sales records.

Table 1. Reconciliation of Financial Records

Location*	Financial Record Discrepancies	Reconciliation Procedures
Fort Detrick	No	No
Fort Indiantown Gap	No	No
Fort Riley	No	No
NAB, Coronado	No	No
NETC, Newport	No	No
NWS, Yorktown	No	No
Camp Pendleton	No	No
USMCAS, Yuma	No	No
USMCC, Blount Island	No	No
Hill AFB	Yes	No
MacDill AFB	No	No
Nellis AFB	No	No
Tinker AFB	Yes	No
DDR, East	Yes	No
DDR, West	Yes	No
DSC, Richmond	Yes	No

* See Appendix D for the list of acronyms used in the table.

Sales of Recyclable Material. Sales of recyclable material at three installations was not properly conducted for sales below $15,000. Guidance on the sale of recyclable material in the DUSD (Environmental Security) recycling policy was very limited. The 40 U.S.C. 484 and 41 Code of Federal Regulations 101-45 prescribed detailed requirements for public advertising, and bid and award procedures for sales transactions estimated to exceed a market value of $15,000. However, for 15 of the 16 installations we visited, the estimated market value of the sales conducted were below $15,000. Specifically, one installation had completed two sales transactions that exceeded the $15,000 threshold. It had followed the public advertising, and bid and award procedures articulated in the prevailing regulations. Conversely, 40 U.S.C. 484 and 41 Code of Federal Regulations 101-45 simply state that sales estimated to have a fair market value of $15,000 or less may be negotiated, but "subject to obtaining such competition as is feasible under the circumstances." Because of the limited guidance on the sale of recyclable material below $15,000, installation managers generally developed their own informal bid and award procedures, some of which were not adequate. Based on observed sales procedures, 3 of 16 installations had inadequate sales procedures. Further, only 7 of the 16 installations had written sales procedures. Among the seven only Defense Distribution Region, West, Ogden, Utah, had adequate written procedures that required market surveys to determine fair market value and evaluation of price quotes for acceptability (see Table 2).

Table 2. Adequacy of Sales Procedures

Location*	Adequate Observed Sales Procedures	Adequate Written Sales Procedures
Fort Detrick	No	No
Fort Indiantown Gap	Yes	No
Fort Riley	Yes	No
NAB, Coronado	Yes	No
NETC, Newport	Yes	No
NWS, Yorktown	Yes	No
Camp Pendleton	Yes	No
USMCAS, Yuma	Yes	No
USMCC, Blount Island	Yes	No
Hill AFB	Yes	No
MacDill AFB	Yes	No
Nellis AFB	Yes	No
Tinker AFB	Yes	No
DDR, East	No	No
DDR, West	Yes	Yes
DSC, Richmond	No	No

* See Appendix D for the list of acronyms used in the table.

At two of the three installations with inadequate sales procedures (Fort Detrick and Defense Supply Center, Richmond), the QRP manager phoned local vendors, requested prices, and made awards to the highest bidder; but the QRP manager did not document the vendors contacted, the prices quoted, the rationale for selecting the winning bid, and the agreements made. Those procedures were not adequate to ensure that sales were based on competitive bids whenever possible, that a fair market price was received, and that the contractor's performance was in accordance with the agreements made.

Procedures were inadequate at two installations (Defense Distribution Region, East and Defense Supply Center, Richmond) because the separation of duties was not sufficient in the sales process. At 10 installations where the separation of duties could be determined, one person was assigned for each of the functions. Specifically, the two installations had insufficient separation of duties between the sale of recyclable material and the collection and disposition of sales proceeds. The QRP managers solicited, negotiated, and awarded sales, and received proceeds from the sales, sometimes by check or cash. Although, there was no evidence of theft at the two installations, in FY 1995, one QRP manager at the Defense Supply Center, Richmond, solicited and awarded $53,677 in sales, and received the proceeds by checks and cash from those sales.

Management Controls

At the 16 installations visited, weaknesses in the reconciliation of financial and sales records and sales procedures and the collection of proceeds procedures were identified. They were caused by inadequate or nonexistent management control systems and procedures. The effect of the weakness were errors in the financial records at five installations. At all 16 installations, the lack of written procedures could allow errors to go undetected and uncorrected.

Periodic Reconciliation. The DUSD (Environmental Security) recycling policy and DoD Components' implementing guidance did not require that recycling managers and those installation officials responsible for financial records periodically reconcile sales and financial records. The recycling policy merely stated that records should show proceeds from the sale of recyclable materials for annual fiscal year reporting requirements, review, and program evaluation purposes. The DoD Components' implementing instructions and regulations either mirror that guidance or are silent regarding the requirements for reconciliation of sales and financial records.

As a result of the weaknesses, officials at five installations did not have accurate financial information for the revenues of direct sales on which to make program decisions. Accurate revenue data are critical in deciding whether it is cost-effective to continue to perform QRP functions, including direct sales, in-house or to outsource the functions or return the performance of the functions to DRMS. At two installations, officials could not ensure that proceeds from the direct sale of recyclable materials were adequately protected.

Sales Procedures. Neither the DUSD (Environmental Security) recycling policy memorandums, 41 Code of Federal Regulations 101-45, nor the DoD Components' implementing instructions provide procedural guidance for sales of recyclable material estimated to be less than $15,000. Therefore, QRP managers established sales procedures based on their best judgment. As a result of the weaknesses, two installations could not demonstrate that sales awarded were based on competitive bids or that a fair market price was received, and 15 installations either had no written sales procedures or the procedures they had were inadequate. The scope of risks could significantly increase in the near future because, in accordance with DoD Instruction 4715.4, DoD organizations can now authorize installation commanders to sell recyclable material directly, without DLA approval.

Actions Taken

During the evaluation, the DUSD (Environmental Security) memorandums containing the QRP policy were superseded by DoD Instruction 4715.4. The Instruction requires that procedures and controls be developed addressing recyclable materials, and that an accounting and control system be established that provides management with audit information, tracks material quantity

handled, calculates sales and handling costs, and tracks expenditures. The Instruction further emphasizes, "Integrity of the audit trail will be [a] priority concern." The Instruction, however, does not contain specific guidance regarding procedures for reconciling sales and financial records, the proper conduct of recyclable material sales below $15,000, and the separation of duties on collection of proceeds.

The Assistant Deputy Under Secretary of Defense (Environmental Quality), within the Office of the DUSD (Environmental Security), recognized the need for further guidance in the financial and sales area, and recently formed the Joint Services Recycling Working Group, a working group that reports to the DoD Pollution Prevention Committee. The working group has been tasked to develop a Combined Services QRP guide. The Inspector General, DoD, is participating as a member of the working group. We believe the guide provides an excellent means to resolve the weaknesses identified in this report.

Recommendations for Corrective Action

A. We recommend that the Deputy Under Secretary of Defense (Environmental Security) issue the Combined Services Qualified Recycling Program guide being developed by the Joint Services Recycling Working Group. The guide should contain specific guidance on:

1. Periodically reconciling sales and financial records.

2. Establishing proper recyclable material sales below $15,000 with proper separation of duties on the collection of proceeds.

Management Comments

The DUSD (Environmental Security) concurred with the recommendation, stating that the Combined Services Qualified Recycling Program Guide will be published by the end of FY 1997, and will contain the recommended guidance.

Finding B. Proceeds, Costs, and Benefits

While installation officials generally distributed proceeds for purposes consistent with the DUSD (Environmental Security) policy, they did not consistently identify the reimbursable costs for recycling programs and did not consistently treat cost avoidances. Also, the costs needed to show the net benefits of adopting direct sales programs were not consistently identified and reported. The conditions occurred because DoD guidance did not provide sufficient detail on treating costs and reporting and monitoring mechanisms were inadequate for ensuring consistency within all installations. As a result, decisionmakers within the Military Departments and DLA did not have sufficient information to ensure the accurate calculation of net proceeds and net benefits at installations, and to decide whether to permit their organizations to expand the direct sale of recyclable materials. In addition, installation officials did not have adequate cost information to decide on the most cost-effective method for conducting direct sales.

Policy Requirements

Policy in Effect at Installations. The DUSD (Environmental Security) September 28, 1993 memorandum, provided guidance on how to distribute proceeds from the sale of recyclable material, when to recover recycling costs, and what benefits should be expected before installations initiate a program for the direct sale of recyclable material instead of consigning the material to DRMS for sale. Specifically, the guidance states that:

o proceeds from the sale of recyclable material shall be used first to reimburse the installation level costs incurred in operating the recycling program;

o recycling costs subject to reimbursement are those for operation and maintenance and for overhead;

o 50 percent of the net proceeds from the sale of recycling materials may be used by the installation for various environmental and health and safety purposes, or the net proceeds may go toward MWR programs; and

o installations may be given approval to conduct direct sales of recyclable material if direct sales were expected to result in increased proceeds, net of cost, increased efficiency, or cost effectiveness or the sale of material is expected to result in the direct return of a usable product containing that material.

DoD Instruction 4715.4. DoD Instruction 4715.4 continues to permit the direct sale of recyclable materials but changes some aspects of the prior policy. Specifically, the Instruction transfers authority to permit the direct sale of

recyclable material at installations from DLA to the heads of the DoD Components. The Instruction also dropped previous guidance on conducting direct sales only when net benefits are expected. Heads of the DoD Components are permitted to allow direct sales at the installations, as appropriate. In addition, if installations consign recyclable material to DRMS for sale, DRMS may recoup its costs before distributing the proceeds to the installation.

Code of Federal Regulations. The 32 Code of Federal Regulations, part 172, "Disposition of Proceeds From DoD Sales of Surplus Personal Property," July 1, 1994, is referenced in the recently published DoD Instruction 4715.4. Part 172 lists four major functions associated with the disposal of recyclable material: pick up and movement to a processing point; physical and chemical processing; sale of recyclable material; and collection and disposition of sales proceeds. Cost elements for QRP functions listed in part 172 include capitol investment, direct labor, supplies, transportation, utilities, and indirect costs.

Use of Proceeds

Compliance with Requirements. Installation officials generally distributed proceeds for purposes consistent with the DUSD (Environmental Security) policy. At 15 of the 16 installations, we assessed compliance with the requirements on distributing proceeds; 13 generally complied with the requirements. The installation we did not assess was newly authorized to conduct direct sales. The 13 installations covered costs, as they defined them, before distributing proceeds for other purposes. They also devoted any net proceeds to the general categories allowed by the policy: MWR or various environmental, health, and safety areas.

Two installations failed to fully comply with policy guidance on distributing proceeds. At one installation, officials used QRP proceeds to pay for a $40,000-carpet installation. At another installation, reimbursements to cover $160,000 in costs for FYs 1994 and 1995 were delayed because of an internal dispute. Reimbursements were not made before net proceeds were distributed for MWR purposes.

Carpet Expenditure. The questionable carpet expenditure occurred when an official used QRP funds to pay for carpet installation to avoid end of year funding problems. The Operations and Maintenance funds intended for the carpet installation were used to purchase computer equipment used in the Hazardous Waste program. The $40,000-purchase was approximately 30 percent of the net proceeds for the QRP at the installation in FY 1995. In explaining their actions, installation officials suggested that the law and the September 1993 policy memorandum from DUSD (Environmental Security) did not preclude the use of funds for other purposes because the policy discussed how funds "may" be used, but did not use more restrictive language. Officials at DUSD (Environmental Security) did not agree with that interpretation. DoD

Instruction 4715.4 retained the previous policy language on how distributions may be made. Supplementary information in the Combined Services QRP guide under development should clarify any questions on this issue.

Cost Reimbursement Delay. The dispute over costs involved an internal disagreement at an installation over the amount of charges that should be reimbursed to an organization on the installation that broke down wooden pallets for the recycling center to eventually sell. The installation made distributions for MWR before resolving the issue, which was counter to the policy of using funds first to cover costs. However, sufficient funds were maintained in QRP accounts to cover the tenant activity costs after the issue was resolved.

Although requirements on the distribution of proceeds were generally met, a key element in the calculation of net proceeds--the identification of costs associated with recycling programs--needed improvement.

Identification of Costs

The 16 installations we visited did not consistently identify the reimbursable costs for recycling programs and did not consistently treat cost avoidances. The condition occurred because DoD guidance did not provide sufficient detail on treating reimbursable costs for items such as managerial time, equipment and transportation. Also, DoD guidance did not provide guidance on which cost avoidances could be offset against other costs. As a result, decisionmakers within the Military Departments and DLA did not have sufficient information to ensure the accurate calculation of net proceeds.

Identification of Reimbursable Costs. The treatment of reimbursable costs for conducting recycling operations varied at the 16 installations visited. Reimbursable costs are the expenses related to recycling operations that should be charged against the installation recycling accounts. The amount of surplus generated by recycling programs depends, in part, on how reimbursable costs are defined. Table 3 shows the differing reported treatment of three reimbursable costs: QRP Program Manager Costs, Equipment Costs, and Transportation Costs.

Table 3. Reported Treatment of Costs

Location[1]	Program Costs[2]	Equipment Costs[2]	Trans-portation Costs[2]
Fort Detrick	Yes	No	No
Fort Indiantown Gap	Yes	Yes	Yes
Fort Riley	Yes	Yes	Yes
NAB, Coronado	No	No	No
NETC, Newport	No	Yes	N/A
NWS, Yorktown	Yes	Yes	No
Camp Pendleton	Yes	Yes	Yes
USMCAS, Yuma	Yes	No	No
USMCC, Blount Island	No	Yes	N/A
Hill AFB	Yes	Yes	No
MacDill AFB	No	N/A	N/A
Nellis AFB	No	N/A	N/A
Tinker AFB	Yes	Yes	Yes
DDR, East	Yes	No	No
DDR, West	Yes	No	Yes
DSC, Richmond	No	Yes	Yes

[1]See Appendix D for list of acronyms used in the table.

[2]See key in Appendix D.

Program Manager Costs. Installation officials did not always treat the personnel costs associated with managing the recycling program as a recoupable expense, even when most of the manager's time was devoted to recycling efforts. As shown in Table 3, at six installations, the costs of managing recycling efforts were not treated as reimbursable costs. Rather, the installations paid the salaries of the managers out of Appropriated funds, and did not reimburse the Appropriated accounts. In all of these instances, the personnel managing the program had duties outside the recycling arena, often in the solid waste area. However, none of the six attempted to prorate the managerial costs of recycling activities among other duties. At one installation, most of the manager's time was spent on recycling, but installation officials did not reimburse the recycling account for any of the manager's salary. The pay range for the general schedule position was between $30,000 and $40,000 per year. At 10 installations, officials reported that they used proceeds generated from the sale of recyclable material to reimburse all or part of the personnel costs of those persons responsible for managing the installation's recycling centers. For example, at one installation where the manager had duties outside the recycling arena, installation officials prorated $9,000 towards the recycling account in FY 1995 to reimburse that part of the managers time devoted to the recycling efforts. While the question of how to allocate personnel expenses

requires clarification, expenses for managers who spend a majority of their time devoted to recycling activities should be appropriately prorated towards the recycling accounts.

Equipment Costs. At five installations, all or part of the equipment costs, such as cardboard compactors and vehicles, were not treated as expenses that required reimbursement before the distribution of proceeds (see Table 3). At the other 11 installations, equipment costs were treated as either recycling program costs or as part of contracts awarded for recycling services. The effect of not treating equipment costs as recoupable costs is that net proceeds may be overstated and equipment may be purchased when it is not economical to do so. Equipment purchases were not treated as a recoupable expense, rather they were either included in environmental program budgets or the equipment was considered to be excess.

Environmental Equipment. At one installation, officials reported that equipment purchases for the recycling program were approved within the environmental budget and funded with appropriated funds. Officials had purchased bailing machines, a magnetic metal separator, and other recycling equipment at a total cost of $70,000 in FY 1996. The purchases were clearly recoupable expenses.

Donated or Excess Equipment. Several installation officials did not believe they had to recoup costs before distributing net proceeds for donated equipment or equipment originally purchased through appropriated or MWR-funded sources. Guidance was not clear regarding the correct treatment for such equipment. Equipment costs that were not recouped included those for forklifts, vertical bailers, and wood chippers.

Transportation Costs. The costs for transporting recyclable material from a drop off point to the recycling center were not consistently treated at the installations we visited. At six installations, not all costs incurred for transporting recyclable materials from a drop off point on the installation to the recycling center were treated as reimbursable costs (see Table 3). At four installations, transportation costs from the drop off points were included in recycling contracts. At the remaining six installations, the costs were treated as expenses that are reimbursable from recycling proceeds. For example, at one of the six installations that did recoup transportation costs, vehicle lease costs totaling $17,861 in FY 1995 were recouped. Installations treated transportation costs differently for different reasons. At some installations, military vehicles were used for transportation and the costs were not reimbursed. In other instances, the question was asked whether pick up and transportation of recycling materials performed under the same contracts awarded for solid waste purposes should be counted as recycling costs. The use of military vehicles should be treated as a recoupable cost. However, the correct treatment of transportation costs associated with both recyclable material and solid waste pick up is not clearly defined in DUSD (Environmental Security) guidance.

Treatment of Cost Avoidances. At two installations, the policy on treatment of cost avoidances was not consistent with other installations. Cost avoidances, in the context of recycling programs, are the costs of waste handling, hauling,

and disposal, that an organization would incur in the absence of recycling. For example, if cardboard waste at an organization was recycled and not sent to a landfill for disposal, the organization would avoid paying the hauling costs for the solid waste disposal. At two installations we visited, the cost avoidances from the recycling program could be used to offset costs incurred for picking up and transporting recyclable material to the installation recycling center because the guidance issued by the intermediate level command permitted it. Guidance from the Air Force Material Command stated that savings from recycling in lieu of disposal of wastes in a landfill may be applied to offset any increase in costs for collection and transportation of materials to the recycling operations center. Such cost avoidance offsets were not permitted at the other 14 installations visited because neither the DoD or the Military Department guidance that applied to the installation addressed the issue.

The importance of defining the degree to which costs can be offset against cost avoidance is illustrated in the following example. Officials at an installation calculated that they spent $300,000 in FY 1995 to recycle wood chips and recouped $50,000, for a net loss of $250,000. They planned to discontinue the recycling of the wood chips in FY 1997 and contract out the disposal as solid waste. In April 1996, officials estimated that the contract would cost $607,000. Because cost avoidances could not be offset against the costs, officials believed that they were forced to end the recycling and use the solid waste contractor, that would increase overall costs to the U.S. Government and increase the waste stream.

Guidance on Costs. Installations treated costs differently because DoD guidance did not provide sufficient detail on treatment of costs. The DUSD (Environmental Security) guidance on recycling does not discuss how to allocate costs for personnel, particularly those who have duties outside the recycling arena. In addition, the prevailing DoD guidance does not address how to treat initial investment costs or whether pick up and transportation of recycling materials performed under the same contracts assigned for solid waste purposes should be counted as costs. Also, DoD guidance does not discuss the degree to which cost avoidance could be used to offset costs.

The DUSD (Environmental Security) staff drafted a handbook containing supplemental guidance, but it was not approved and published. The handbook discussed the cost elements for recycling that are defined in 32 Code of Federal Regulations, part 172, and also discussed in DoD Instruction 7310.1, "Disposition of Proceeds from DoD Sales of Surplus Personal Property," July 10, 1989. Including that material in the Combined Services QRP guide that is being prepared will provide clarification on allocating staffing costs, and defining reimbursable equipment and transportation costs, and treating cost avoidances. The draft handbook also discussed the issue of cost avoidances, although it did not provide any specific guidance.

Identification of Benefits

The 16 installations we visited did not consistently identify the costs needed to show the net benefits of initiating direct sales programs. The condition occurred because reporting and monitoring mechanisms were inadequate for ensuring consistency within all installations. As a result, decisionmakers within the Military Departments and DLA did not have sufficient information on net benefits at installations and the information needed to decide whether their organizations should expand the direct sale of recyclable materials.

Costs Needed to Show Net Benefits From Direct Sales. Installation officials cited numerous benefits that they had realized from direct sale programs, but the costs associated with the benefits were not consistently identified and reported. Benefits that installation officials reported as a result of direct sale programs included reductions in the waste stream, faster receipt of payment than through the DRMS, and improvements to MWR. However, most installations were not identifying and reporting information on the costs, if any, associated with realizing the benefits of direct sales. DLA requested such cost information from the installations to support requests to initiate and renew authorizations to conduct direct sales. Specifically, DRMS memorandum, "Procedures for Handling Installation Requests for Approval of Direct Sale of Recyclable Materials Purchased with Appropriated Funds," August 10, 1995, required the identification and reporting of market versus DRMS prices by commodity that included costs for overhead and transportation. However, only 5 of the 16 installations we visited included any mention of that calculation in their applications, and only one presented specific cost data for all items.

Reporting Requirements and Monitoring. Installations did not document the costs associated with the benefits expected from the initiation of direct sales because the existing reporting requirements were not enforced. DLA granted approval for direct sales even when installations did not provide the cost and benefit information. However, the approval letters in those instances advised installations to maintain such information given Inspector General, DoD, and General Accounting Office interest in recycling sales. DoD Instruction 4715.4 removes the requirement for demonstrating a net benefit from initiating direct sales and instructs heads of DoD Components to conduct sales as appropriate. The Instruction further assigns monitoring of compliance with direct sales requirements to the heads of DoD Components. The DUSD (Environmental Security) can ensure that the costs of initiating and expanding direct sales are properly considered by including supplemental guidance on the topic in the Combined Services QRP guide that establishes reporting requirements on cost information to the organizations granting approval to conduct direct sales. Establishment of such reporting requirements will help the Military Department decisionmakers ensure that the installations to whom they grant authority for direct sales have properly considered the additional costs, if any, that are involved. Past difficulties in obtaining complete cost information also support the need for monitoring mechanisms to ensure consistent compliance with reporting requirements. Acquiring good information on the additional costs of

carrying out direct sale programs are needed because decisionmakers must decide on the degree to which direct sales should be promoted at the installation level rather than conducted at the DRMS.

The reporting and monitoring mechanisms could build upon existing systems such as the Solid Waste Annual Report and periodic environment program reviews. The Solid Waste Annual Report is required by DoD Directive 4165.60, "Solid Waste Management," October 4, 1976. As of September 1996, the report required information on recycling costs. However, it did not require information on costs associated with taking over direct sales. Future requirements for the Solid Waste Annual Report could include requirements for such information. Monitoring of compliance with reporting requirements could be incorporated into Service Inspectors General reviews or existing periodic assessments in the environmental area required under DoD Directive 4715.6, "Environmental Compliance," April 24, 1996.

Recommendations for Corrective Action

B. We recommend that the Deputy Under Secretary of Defense (Environmental Security) Combined Services Qualified Recycling Program guide:

1. Clearly define the appropriate uses for the net proceeds from the sale of recyclable material.

2. Clearly define the treatment of costs associated with recycling programs. Specifically,

a. Allocate program manager costs.

b. Define recycling equipment costs versus equipment costs associated with solid waste management, and proper accounting for donated equipment costs and initial equipment costs.

c. Distinguish between transportation costs associated with the pick up of solid waste management, and pick up and transportation costs that involve only recyclable material.

d. Determine cost avoidances and to what degree cost avoidances may be offset against program costs.

e. Establish requirements for installations to periodically report information through the Solid Waste Annual Report on sales revenues, reimbursable costs, and the additional costs associated with adopting direct sale programs to the Headquarters office granting authorization for the program.

f. Establish periodic monitoring for ensuring accurate reporting from the installations.

Management Comments.

The DUSD (Environmental Security) concurred with the recommendation, and stated that the Combined Services Qualified Recycling Program Guide, scheduled to be published by the end of FY 1997, will contain the recommended guidance.

Finding C. Outsourcing Qualified Recycling Program Functions

Officials at 10 of 16 installations had not considered or attempted to outsource QRP functions to recycling contractors. Installation officials had not attempted to outsource because the DUSD (Environmental Security) policy on recycling did not require QRPs to identify outsourcing opportunities. In addition, officials at five installations were not aware of or did not understand the laws, regulations, and policies on outsourcing. As a result, installation officials could not always demonstrate that the best value for the Government had been obtained by performing QRP functions in-house. Further, installation officials at the 10 installations assumed sales and accounting responsibilities and costs that could have been outsourced to a contractor.

Statutory and Regulatory Requirements

Government-Wide Requirements. The Office of Management and Budget and the Office of Federal Procurement Policy guidance establish requirements on outsourcing Government functions that are considered to be commercial activities.

o The revised supplemental handbook of the Office of Management and Budget Circular No. A-76, "Performance of Commercial Activities," March 1996, states that performance of commercial activities will be obtained through competitively awarded contracts unless the contracting officer determines that fair and reasonable prices or satisfactory contract performance cannot be obtained. The Circular also states that if the functional activity cannot be outsourced because no satisfactory contractor is available, it is to be performed by the Government's most efficient organization.

o All major QRP functions, such as pick up and transportation, processing, sale, and collection of sale proceeds, are a part of an installation's property disposal responsibilities. Additional functions associated with the direct sale of recyclable material include market research to locate recycling businesses, solicitating and evaluating bids for materials to be sold, as well as the recordkeeping and accounting for sales and collection of sales proceeds. As stated in Office of Federal Procurement Policy Letter 92-1, "Inherently Governmental Functions," September 23, 1992, the only inherently governmental function involved in property disposal is the determination of what materials are to be sold or otherwise disposed of, and the terms of a disposal contract, interservice support agreement, or other method. All other functions are recurring commercial activities that can be performed by qualified recycling businesses.

DoD Requirements, Policy, and Procedures. The DoD requirement for outsourcing is stated in 10 U.S.C. 2462 and reiterated in DoD directives and

policy. The 10 U.S.C. 2462 requires DoD Components to outsource to private firms capable of performing required services at a lower cost than DoD employees can perform them. DoD policy and procedures on outsourcing commercial activities are stated in DoD Directive 4100.15, "Commercial Activities Program," March 10, 1989, and DoD Instruction 4100.33, "Commercial Activities Program Procedures," September 9, 1985. The policies and procedures in the Directive and the Instruction are mandatory for organizations staffed partially or solely with DoD civilian employees who are paid from appropriated funds. The policies and procedures are optional for organizations staffed solely with employees who are paid from nonappropriated funds.

o DoD Directive 4100.15 states that a comparison of the cost of outsourcing and the cost of in-house performance shall be completed to determine which provides the best value for the Government, considering price and other factors, such as quality and performance. In addition, the Directive states that DoD Components shall rely on commercial businesses to provide commercial products or services, and shall not consider a new in-house requirement or the expansion of an in-house requirement if the products or services can be procured more economically from commercial sources. DoD Instruction 4100.33 states that commercial activities involving 10 or fewer appropriated fund civilian employees may be outsourced without a cost comparison. DoD Directive 4100.15 and DoD Instruction 4100.33 also state that cost comparisons are not mandatory for activities staffed solely with nonappropriated fund employees.

o The DoD commitment to use the commercial sector to perform services that have been performed by DoD civilian and military employees is stated in a Deputy Secretary of Defense memorandum, February 26, 1996. DoD efforts to outsource property disposal and sales functions are described in a March 1996 report to Congress titled, "Improving the Combat Edge Through Outsourcing." The use of contractual agreements with municipal or private sources to provide solid waste collection and disposal services is also suggested in DoD Instruction 4715.6.

Consideration of Outsourcing

Officials at 10 of the 16 installations visited had not considered or attempted to outsource QRP functions to private recycling contractors. The condition occurred because the DUSD (Environmental Security) policy on recycling did not require DoD Components to identify outsourcing opportunities. In addition, officials at 5 of the 10 installations were not aware of or did not understand the laws, regulations, and policies on outsourcing. The 10 U.S.C. 2462, Office of Management and Budget Circular A-76, Office of Federal Procurement Policy letter 92-1, DoD Directive 4100.15 and DoD Instruction 4100.33 were not referenced or discussed in the DUSD (Environmental Security) September 28, 1993, policy memorandum. DoD Instruction 4715.4, which was published by the DUSD (Environmental Security) to supersede the policy memorandum,

discusses the establishment of QRPs, when the establishment is cost-effective to do so, but does not reference or discuss statutes, directives and policies on outsourcing. Table 4 shows the 10 installations that had not considered or attempted to outsource QRP functions. Of the 16 QRP organizations we visited, 4 were staffed solely with nonappropriated fund employees and were not required to outsource by DoD Directive 4100.15 and DoD Instruction 4100.33. However, the guidance does not prohibit nonappropriated fund organizations from considering outsourcing opportunities. In fact, officials at one of the four QRP organizations staffed solely with nonappropriated fund employees stated that they were going to consider such opportunities. Installations that had not considered or attempted to outsource QRP functions included those with some appropriated fund employees and those with all employees funded through nonappropriated fund sources.

Table 4. QRP Outsourcing and Staffing

Location*	Outsourced Functions	Appropriated Fund Staff
Fort Detrick	No	No
Fort Indiantown Gap	No	Yes
Fort Riley	No	No
NAB, Coronado	Considered	Yes
NETC, Newport	Yes	Yes
NWS, Yorktown	Attempted	Yes
Camp Pendleton	No	Yes
USMCAS, Yuma	No	Yes
USMCC, Blount Island	Yes	Yes
Hill AFB	No	No
MacDill AFB	Yes	Yes
Nellis AFB	Yes	Yes
Tinker AFB	No	No
DDR, East	No	Yes
DDR, West	No	Yes
DSC, Richmond	No	Yes

* See Appendix D for the list of acronyms used in the table.

Appropriated Funded QRPs. Officials at six installations performing all or some of the QRP functions (including direct sales) in-house with appropriated funded civilian employees either had not attempted, or had no documentation of an attempt, to outsource those functions to recycling contractors. Responses to a questionnaire on the subject of outsourcing indicated that at Fort Indiantown Gap, Maryland; Camp Pendleton, California; US Marine Corps Air Station, Yuma, Arizona; Defense Distribution Region East, New Cumberland, Pennsylvania; and Defense Supply Center, Richmond, Virginia, officials were either unaware of the statutory and regulatory requirements for outsourcing the functions or they did not understand the requirements. Installation officials at

the Defense Distribution Region, West, Ogden, Utah, responded that they did not attempt to outsource QRP functions because the installation had been selected for closure.

Officials at two other installations with appropriated fund civilian employees in their QRP had attempted or considered outsourcing QRP functions. Specifically, the Naval Weapons Station, Yorktown, Virginia, solicited bids in 1995 for the pick up, transportation, and processing functions. Only one company responded with a price of $207,375 per year. The in-house cost was calculated at $128,011 per year. The Naval Amphibious Base, Coronado, California, has 30 military tenant activities as well as the San Diego Naval Correctional Facility. The tenant organizations provide the QRP manager with as many military employees as he needs at no cost to pick up, transport, and process recyclable materials. The base is under Federal court order to use a city franchised contractor for all solid waste removal from the base. The contractor is reportedly charging approximately twice the price for those services than had been charged before the court order. The QRP manager determined through discussions with the new contractor that the charge for picking up, processing, and selling recyclable material would also be inflated.

Nonappropriated Funded QRPs. Respondents at four installations with QRPs staffed solely with nonappropriated fund employees had not considered outsourcing QRP functions or had no documentation of an attempt to outsource QRP functions to recycling contractors. Respondents from two of the four installations cited DoD Directive 4100.15 and DoD Instruction 4100.33 as their bases for exemption from the requirement to outsource for activities staffed solely with employees paid from nonappropriated funds. Respondents at the third installation staffed with nonappropriated fund employees stated that they believed that some QRP functions were inherently governmental rather than commercial activities. The respondent from the fourth nonappropriated fund QRP stated that installation officials were going to request price quotations from a local recycling company for performing the direct sales function as a result of our questionnaire.

Outsourced QRP Functions. Of the 16 installations visited, 4 outsourced the performance of all or most QRP functions to recycling contractors, including the direct sale of recyclable material. The civilian employees at the installations performed oversight of the work of recycling contractors as a collateral duty.

o The Naval Education Training Center, Newport, Rhode Island, outsourced all QRP functions associated with the recycling of materials requiring regularly scheduled pick ups, such as aluminum cans, cardboard, glass, paper, and plastic. However, in-house QRP employees at that installation were processing and selling scrap steel and other scrap metals in an attempt to obtain higher prices.

o At two other installations, the contracting offices outsourced all QRP functions and deposited the monthly proceeds they received from the contractors directly into installation recycling accounts. Specifically, the contracting office at the Marine Corps installation on Blount Island, Florida, issued two contracts for the direct sale of certain recyclable materials. One contract provided for the

removal and sale of cardboard and paper; the other contract provided for the removal and sale of scrap steel. The contractors paid all costs, except the salary of the QRP manager, who had oversight of the contracts. Monthly net proceeds were deposited into the installation QRP account. At MacDill Air Force Base, Tampa, Florida, the contracting office arranged for the contractor that removes all solid waste to also collect and sell aluminum cans, cardboard, glass, paper, and plastic.

o At Nellis Air Force Base, Las Vegas, Nevada, the QRP had been a nonappropriated fund activity before FY 1995. However, beginning in FY 1995, officials at Nellis Air Force Base tasked the local DRMS office to outsource all QRP functions and to manage the contracts for contractor performance of those functions. Nellis received FY 1995 proceeds totaling $147,328 from the DRMS through the Defense Finance and Accounting Service.

Effects of Not Attempting to Outsource

By not attempting to outsource QRP functions to qualified contractors, installation officials could not demonstrate that they were obtaining the best value or benefit for their installation by performing the functions in-house. Specifically, installation officials could not demonstrate that the costs incurred for performing the QRP functions in-house resulted in greater net proceeds and a cost-effective waste reduction and recycling program. In addition, the officials that had not attempted to outsource QRP functions assumed sales and accounting responsibilities and costs associated with commercial activities that may have been performed more cost-effectively by a recycling contractor. Where installation officials previously determined that outsourcing was not appropriate, the officials could be faced with the need to reconsider their decision if declines in market prices for some recyclable materials have reduced revenues to the point that in-house performance of the recycling programs are no longer cost-effective.

Recommendation for Corrective Action

C. We recommend that the Deputy Under Secretary of Defense (Environmental Security) modify DoD Instruction 4715.4 or provide guidance in the forthcoming Combined Services Qualified Recycling Program guide to require that outsourcing opportunities be considered when Qualified Recycling Programs are established or modified to include direct sales authority, or when market conditions for recyclable material change.

Management Comments

The DUSD (Environmental Security) concurred with the recommendation, and stated that the Combined Services Qualified Recycling Program Guide, scheduled to be published by the end of FY 1997, will contain the recommended guidance.

Part II - Additional Information

Appendix A. Evaluation Process

Scope

Universe and Sample. We evaluated the direct sale of recyclable materials at 16 installations. Fifteen of the installations were among 37 installations authorized, as of August 1995, to conduct the direct sale of recyclable material purchased with appropriated funds. The remaining installation received approval to conduct direct sales in January 1996. The 15 installations visited were judgmentally selected from among 20 sites that were randomly chosen from the 37 installations with direct sales authority. The one additional installation was judgmentally selected from among installations that received approval to conduct direct sales in FY 1996. The 16 installations visited included three each from the Army, the Navy, the Marine Corps, and DLA and four from the Air Force. Appendix E provides the FY 1995 and FY 1996 gross revenues for direct sales for the 16 installations.

Documents Reviewed. We reviewed operational records, financial reports, vendor contracts, bills of lading, weigh tickets, and correspondence between DRMS and the installations for the period during which the installations had been authorized to conduct direct sales. The dates of those documents varied from 1993 to 1996, depending on the installation.

Limitations to Scope. The scope of our evaluation did not include the validation of financial data on gross revenues from QRP sales conducted through the DRMS.

Computer-Processed Data. We did not use computer-processed data to perform this evaluation.

Evaluation Period and Standards. This program evaluation was performed from February through August 1996, in accordance with standards issued and implemented by the Inspector General, DoD.

Methodology

The evaluation generally involved on-site interviews and documentation reviews of operational and financial records and reports prepared at each installation for the direct sale of recyclable materials. Specific tests and procedures are noted below.

Records Tests. To determine whether proper operational records were maintained on direct sales of recyclable materials, we designed procedures to test the general accuracy of records based on the requirements identified in the DUSD (Environmental Security) policy memorandums. At each installation,

sales or transactions made since program authorization through March 31, 1996, were divided between those with dollar amounts of more than $1,000 and those with dollar amounts under $1,000. Then, 10 sales or transactions were randomly selected from each group. The test was designed to validate that operational records maintained at the installations contained source documents with required information. To test financial records maintained for direct sales, we compared financial records with operational records for the period from FY 1995 through the first half of FY 1996 to ensure that the gross revenues shown on financial records reconciled with total sales shown in operational records.

Excluded Items. To determine any instances where excluded items or non-authorized items were sold through the direct sales program, we compared operational records, vendor contracts, and other installation recycling documents to approved material identified in the DRMS authorization letter and to the excluded items identified in the DUSD (Environmental Security) recycling policy memorandums.

Proceeds, Costs, and Benefits. To assess the treatment of program costs, the distribution of proceeds, and program benefits, we examined records on expenses and distributions and solid waste management reports. We also obtained testimonial data on the treatment of costs and anticipated and realized benefits. We used an outside source to show the national average market price trend for various recycling material during the period April 1995 through July 1996.

Questionnaires and Forms. We provided a questionnaire to the 16 installations we visited to collect information on whether they had considered outsourcing recyclable material disposal functions. Finally, we discussed and distributed forms for recycle managers to document their ideas on "best practices" or significant problems regarding the direct sale of recyclable material.

Organizations and Individuals Visited or Contacted

Contacts During Evaluation. We visited or contacted individuals and organizations within DoD. Further details are available on request.

Management Control Program

DoD Directive 5010.38, "Internal Management Control Program," April 14, 1987,* requires DoD organizations to implement a comprehensive system of management controls that provides reasonable assurance that programs are operating as intended and to evaluate the adequacy of the controls.

Scope of Review of the Management Control Program. We reviewed the management controls established for the direct sale of recyclable materials at 16 installations. Specifically, we reviewed management controls over contract awards and marketing; distribution of proceeds; excluded or nonauthorized item; financial and operational records; outsourcing; program benefits reporting and tracking; and separation of duties.

Adequacy of Management Controls. The guidance governing the direct sale of recyclable material needed improvement. The recommendations made in this report, if implemented, will correct that control weakness. We did not review a sufficiently large sample of installations to enable a conclusion on the materiality of the weakness to be made.

*DoD Directive 5010.38 has been revised as "Management Control Program," August 26, 1996. The evaluation was performed under the April 1987 version of the Directive.

Appendix B. Prior Audits and Other Reviews

Previous audits have not specifically addressed the direct sale of recyclable material as the primary objective. However, four audits were completed and one is ongoing covering certain aspects of the DoD recycling program.

General Accounting Office

The General Accounting Office issued Report No. NSIAD 94-40 (OSD Case No. 9522), "Department of Defense Widespread Abuse in Recycling Program Increases Funds for Recreational Activities," December 1993, which stated that millions of dollars of proceeds were being used annually for MWR activities that should be used to offset the need for appropriated funds or the proceeds should be returned to the U.S. Treasury. Military bases were routinely receiving money from the sale of aircraft, vehicles, and other materials that DoD policy specifically excluded from the recycling program, and were using the proceeds to fund MWR activities. In addition, some installations, without proper authorization, were holding their own sales rather than selling materials through DRMS. The report recommended that the Secretary of Defense require that internal controls be complied with to ensure that installations and DRMS meet the letter and intent of the 1982 legislation, identify and report recycling program issues as material weakness under the annual Financial Management Integrity Act assessments, and require the Inspector General, DoD, or the Services' audit agencies to periodically audit recycling program to assess compliance with 1982 legislation and DoD policy. DoD partially concurred with the report. The DUSD (Environmental Security) agreed to emphasize the need for full compliance with legislation and policy and request periodic audits of the Resource Recovery and Recycling Program. The DoD response did not agree to identify the recycling issues as material weaknesses under the annual Financial Management Integrity Act assessments, but agreed to consider the identified reports of deficiency.

Inspector General, DoD

The Inspector General, DoD, issued Report No. 95-025, "Distribution of Proceeds From the Sale of Reimbursable Scrap Material," November 8, 1994. It reported that DRMS did not adequately control the distribution of proceeds from the sale of scrap materiel that qualified for reimbursement, and expenses related to the sale and processing of scrap material were not recovered before distribution of the proceeds to qualified DoD recipients. As a result, recycling programs at installations were receiving proceeds that should have been distributed to Defense Business Operating Fund organization to reduce operating expenses. Additionally, $8.5 million of FY 1993 expenses incurred for

processing reimbursable scrap was not recovered before the distribution of proceeds. The report recommended that DRMS stop distributing to installation recycling programs the proceeds that Defense Business Operating Fund organizations turned in from the sale of scrap; recover the operating expenses incurred in processing reimbursable scrap; and require that audit trails be created for reimbursements. The DRMS partially concurred with the recommendations.

Army

The Army Audit Agency has an ongoing review, No. E6105C, "Army Recycling Program," that is scheduled to be completed in February 1997. The objectives are to determine whether the Army Recycling Program is effective and whether internal management controls are effective.

Army Audit Agency issued Report No. 93-6, "Recycling Program," February 1993, which examined whether the recycling program was adequately managed and whether proceeds were being used to support MWR activities. The report stated that the Army recycling program was not effectively managed and its proceeds were not equitably distributed. The report recommended that the Assistant Secretary of the Army (Installations, Logistics and Environment) develop procedures and policies to manage the recycling program, direct Army managers to ensure that MWR receive at least 50 percent of the net recycling proceeds, use economic analysis to determine most efficient method of establishing program, and establish specific timeframes for distributing proceeds. Also, the report recommended coordination with the Assistant Secretary of the Army (Financial Management) to define standard costs that should be included in the management of the program and implement installation level accounting procedures to identify revenues received and expenses incurred under the program. The Assistant Secretary of the Army (Installations, Logistics and Environment) agreed with the recommendations.

Air Force

The Air Force Audit Agency issued Project No. 93052010, "Management of the Resource Recovery and Recycling Program, April 15, 1994. It reported that 10 audited Air Force bases had established Resource Recovery and Recycling Programs and were recycling to reduce solid waste disposal to some extent. However, the bases did not fully comply with the executive order and other guidance. In addition, training, equipment and facilities were not adequate to support an effective program. The report recommended that the Air Force Civil Engineer require that civil engineering personnel operate the Resource Recovery and Recycling Program and not solely as a profit-motivated program; request major commands to direct subordinate bases to provide the necessary training, equipment, and facilities to achieve program goals; and develop a plan for

achieving the solid waste reduction goals and coordinate with the Army Air Force Exchange System on recyclable items. The report also recommended that the Assistant Secretary of the Air Force (Acquisition) and the Chief of Logistics provide guidance on affirmative procurement (the consideration of recyclability during acquisition planning) and supply usage of recyclable materials. The appropriate Air Force staff concurred with the recommendations.

Appendix C. Other Matters of Interest

This appendix provides the results of our review to determine whether installations were directly selling recyclable materials excluded by policy, or not authorized by DRMS. It also summarizes our discussions with installation managers regarding "best practices" or significant problems related to direct sale of recyclable material operations. The information does not require a response to the Inspector General, DoD.

Exclusions and Authorizations

Excluded Items Not Sold. The 16 installations visited generally complied with the policies on excluded items. No records showed excluded items being sold through the direct sale of recyclable materials. However, "nonauthorized" items were being sold directly and material was sold directly after authorizations had lapsed.

Nonauthorized Items. Four installations sold nonauthorized items during the period they were authorized direct sales. For example, DRMS authorized one installation to sell computer paper, office paper and mixed paper. However, the installation was also selling cardboard, glass, plastic, scrap metal, and wood pallets without specific authorization.

Sales Outside Authorized Period. Correspondence from the DRMS that approved installation requests for authorization to sell recyclable material directly provided a period of 6 months to 1 year when installations could sell authorized items. After that period, installations were required to again request authorization to sell recyclable material directly. Five installations continued to sell recyclable material directly after the DRMS authorized period had lapsed. Two other installations sold items that did not meet the definition of recyclable material. For example, one installation sold abandoned vehicles through the direct sale of recyclable material program.

Flexibility of Authorization Process. One installation recycling manager stated that the DRMS authorization process was inflexible. The direct sale policy did not allow for the unique, one-time sale of material that was not authorized. A transient aircraft containing a cargo of dairy products made an unscheduled landing for maintenance at the installation. While on the ground for maintenance, the dairy products spoiled. A farmer offered to purchase the spoiled dairy products for $10,000 to feed his livestock. However, because the installation was not authorized the direct sale of dairy products, the decision was made to haul it to the landfill, at a cost of $1,400. DoD Instruction 4715.4 should resolve the conditions cited above because it delegates to the heads of the DoD Components, the authority to authorize installation commanders to sell directly recyclable and other QRP materials.

Questionnaire Results

We distributed questionnaires to QRP managers at the 16 installations visited to identify any best practices or significant problems that they experienced in establishing the direct sale of recyclable material programs. Of the 16 installations visited, QRP managers at two installations provided comments as follows.

Comments on Questionnaires. At one installation, the QRP manager believed that the Military Departments and DoD agencies should be required to standardize program operations. (For example, if the Army chooses nonappropriated fund operations, all Army programs should be nonappropriated fund operations; or if the Air Force chooses appropriated fund operations, all Air Force programs should be run by appropriated fund organizations.) The QRP manager stated, "This will allow them to develop standardized operating procedures and eliminate the mix we have now." The QRP manager believed that strong consideration should be given to requiring programs with direct sales authority to operate under nonappropriated fund accounting procedures for simplicity and control.

The QRP manager further stated that clear goals and objectives for recycling programs should be established at the DoD level and all efforts should be directed toward meeting stated goals and objectives. In this QRP manager's view, the for-profit mentality is not compatible with the QRP goals and objectives. He contended that the incentive provided under Public Law 97-214 (10 U.S.C. 2577) has become the unstated goals and objectives and DoD agencies have lost sight of why the programs exist in the first place, which is strictly environmental in nature. The QRP manager opined that this must be fixed, then everything else will fall in line, and suggested that money incentives should be only a by-product, not the main motive. The manager's final point was that environmental stewardship versus making money must be balanced.

Another installation QRP manager commented that all sales should be achieved by contract using Government guidelines for contract bids and awards. Payments should be received by and tracked by the installation accounting and finance office. An audit trail on all transactions (for example, bids, contracts, sales, payments, etc.) should be maintained. Documentation of records should also be maintained on everything. The manager suggested that to avoid pitfalls, the QRP manager should accept no sales without written contracts, and accept no cash payments.

Other Cost Concerns

Other cost areas that we did not inquire about across all installations, but in which we identified individual examples indicating that more guidance may be needed include treatment of depreciation expenses, facility costs, and expenditures on incentive programs for promoting recycling.

Appendix D. Acronyms Used in Tables and Key for Table 3

AFB	Air Force Base
DDR	Defense Distribution Region
DSC	Defense Supply Center
NAB	Naval Amphibious Base
NETC	Naval Education and Training Center
NWS	Naval Weapons Station
USMCAS	United States Marine Corps Air Station
USMCC	United States Marine Corps Command

Key for Table 3.

Yes indicates that costs in the category were reported as a recoupable expense at the installation.

No indicates that not all costs in that category were properly reported as a recoupable expense.

N/A indicates that the cost category is not applicable in the case of that installation because of contracting out of recycling program.

Appendix E. FYs 1995 and 1996 Gross Revenues

Table E-1. FY 1995 Gross Revenue

Location*	FY 1995 Direct Sales	FY 1995 Other	FY 1995 Total QRP
DSC, Richmond	$53,674	$77,689	$131,363
Fort Detrick	86,850	2,323	89,173
Fort Indiantown Gap	93,139	7,019	100,158
Fort Riley	28,824	224,867	253,691
NAB, Coronado	110,072	2,804	112,876
NETC, Newport	47,282	---	47,282
NWS, Yorktown	---	---	---
Camp Pendleton	147,847	277,364	425,211
USMCAS, Yuma	32,554	13,787	46,341
USMCC, Blount Island	479	13,972	14,451
Hill AFB	181,063	540,606	721,669
MacDill AFB	---	---	---
Nellis AFB	---	147,328	147,328
Tinker AFB	237,632	720,351	957,983
DDR, East	352,184	96,110	448,294
DDR, West	141,388	---	141,388
DSC, Richmond	53,674	77,689	131,363
Total	**$1,512,988**	**$2,124,220**	**$3,637,208**

*See Appendix D for list of acronyms used in table.

Table E-2. First Half FY 1996 Gross Revenue

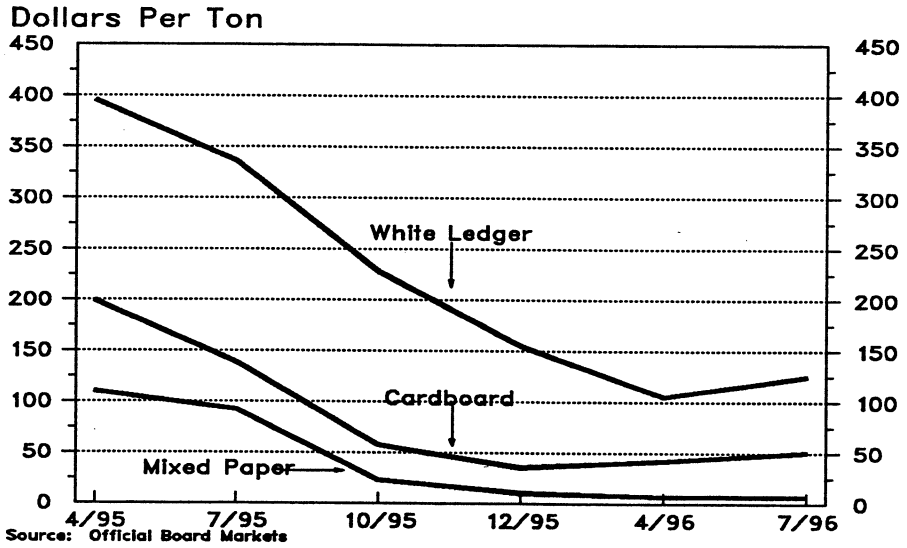
Location[1]	FY 1996 Direct Sales	FY 1996 Other	FY 1996 Total QRP
Fort Detrick	$25,881	$---	$25,881
Fort Indiantown Gap	21,579	---	21,579
Fort Riley	19,653	112,968	132,621
NAB, Coronado	34,246	9,827	44,073
NETC, Newport	10,039	---	10,039
NWS, Yorktown	---	---	---
Camp Pendleton[2]	43,193	64,486	107,679
USMCAS, Yuma[2]	12,129	5,039	17,168
USMCC, Blount Island[2]	2,156	2,574	4,730
Hill AFB	59,159	101,968	161,127
MacDill AFB	---	---	---
Nellis AFB	---	55,565	55,565
Tinker AFB	65,270	155,277	220,547
DDR, East	121,723	---	121,723
DDR, West	24,467	---	24,467
DSC, Richmond	19,993	28,830	48,823
Total	**$459,488**	**$536,534**	**$996,022**

[1]See Appendix D for acronyms used in the table.

[2]Data estimated to show 6 months.

Appendix F. Market Prices for Selected Commodities

Market Prices. The market prices for some recyclable materials sold by the 16 installations decreased between April 1995 and July 1996. The "Official Board Market" is a publication that reports monthly bid prices offered by regional buyers and tracks the historical prices for recyclable materials. As shown in the figure below, the Official Board Market reports that the national average prices offered for white ledger paper, cardboard, and mixed paper have significantly decreased since April 1995. Specifically, the price for white ledger paper decreased 68 percent, from $396 to $125 per ton, cardboard decreased 75 percent, from $199 to $51 per ton, and mixed paper decreased 94 percent from $110 to $7 per ton.



National Average Price Quotes for Recyclable Material

Appendix G. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense (Comptroller)
  Deputy Chief Financial Officer
  Deputy Comptroller (Program/Budget)
Deputy Under Secretary of Defense (Environmental Security)
Assistant to the Secretary of Defense (Public Affairs)
Director, Defense Logistics Studies Information Exchange

Department of the Army

Auditor General, Department of the Army

Department of the Navy

Assistant Secretary of the Navy (Financial Management and Comptroller)
Auditor General, Department of the Navy
Working Group Chairman, Joint Services Recycling Working Group, Chief of Naval Operations, Pollution Prevention (N45)

Department of the Air Force

Assistant Secretary of the Air Force (Financial Management and Comptroller)
Auditor General, Department of the Air Force

Defense Organizations

Director, Defense Contract Audit Agency
Director, Defense Logistics Agency
Director, National Security Agency
  Inspector General, National Security Agency
Inspector General, Defense Intelligence Agency

Non-Defense Federal Organizations and Individuals

Office of Management and Budget
General Accounting Office
National Security and International Affairs Division
Technical Information Center

Chairman and ranking minority member of each of the following congressional committees and subcommittees:

Senate Committee on Appropriations
Senate Subcommittee on Defense, Committee on Appropriations
Senate Committee on Armed Services
Senate Committee on Government Affairs
House Committee on Appropriations
House Subcommittee on National Security, Committee on Appropriations
House Committee on Government Reform and Oversight
House Subcommittee on National Security, International Affairs, and Criminal Justice, Committee on Government Reform and Oversight
House Committee on National Security

Part III - Management Comments

Deputy Under Secretary of Defense (Environmental Security) Comments

OFFICE OF THE UNDER SECRETARY OF DEFENSE

3000 DEFENSE PENTAGON
WASHINGTON DC 20301-3000

ACQUISITION AND TECHNOLOGY

08 JAN 1997

DUSD(ES)

MEMORANDUM FOR DEPARTMENT OF DEFENSE INSPECTOR GENERAL

SUBJECT: Draft Audit Report on the Evaluation of Direct Sales of Recyclable Material (Project No. 6LH-9019)

Thank you for the opportunity to comment on the subject draft audit report. We concur with your report. We intend to implement your recommendations by ensuring that additional guidance regarding the operation of direct sales programs is included in the Combined Services Qualified Recycling Program Guide that is now under development. We have established the end of FY 1997 as the target for publication of the Combined Services Qualified Recycling Program Guide. Attached is a copy of a memorandum from the Combined Services Recycling Working Group that confirms its agreement to issuing the Guide by the end of FY 1997.

Sherri W. Goodman
Deputy Under Secretary of Defense
(Environmental Security)

Attachment

cc: CNO N-45 (Attn: LtCdr Ken Curry)

Environmental Security *Defending Our Future*

Combined Services Qualified Recycling Program
Chief of Naval Operations, N45 (Executive Agent), 1000 Navy Pentagon, Department of the Navy, Washington, DC 20350-1000

19 December 1996

MEMORANDUM FOR DEPUTY UNDER SECRETARY OF DEFENSE (ENVIRONMENTAL SECURITY)

SUBJECT: Draft Audit Report on the Evaluation of Direct Sales of Recyclable Material (Project No. 6LH-9019)

Thank you for the opportunity to comment on the subject draft audit report. The Combined Services Recycling Work Group concurs with the findings and recommendations of subject report. We intend to implement the report's recommendations by ensuring that guidance regarding the operation of direct sales programs is included in the Combined Services Qualified Recycling Program (QRP) Guide, which is under development and will be published during FY97. The recommendations will be incorporated into the text of the QRP Guide and the entire report will be attached to the guide as an appendix.

LCDR Ken Curry, USN
Chairman
Combined Services Recycling Work Group
(N451G)

CC: ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT, DEPARTMENT OF THE ARMY (DAIM-ZA)

CHIEF OF NAVAL OPERATIONS, DIRECTOR, ENVIRONMENTAL PROTECTION, SAFETY AND OCCUPATIONAL HEALTH DIVISION (N45)

HEADQUARTERS UNITED STATES AIR FORCE, OFFICE OF THE CIVIL ENGINEER

COMMANDANT OF THE MARINE CORPS, ASSISTANT DEPUTY CHIEF OF STAFF FOR INSTALLATIONS AND LOGISTICS (FACILITIES)

CHIEF OF SYSTEMS, UNITED STATES COAST GUARD

DIRECTOR, DEFENSE LOGISTICS AGENCY

Printed on 100% Recycled Paper (50% Post-Consumer Fiber)

Audit Team Members

This report was prepared by the Logistics Support Directorate, Office of the Assistant Inspector General for Auditing, DoD.

Shelton R. Young
Debra B. D. Murphy
David Leising
Daniel J. Chambers
Joseph W. Come'
Raymond Hopkins
Arthur J. Maurer
David Pinson