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# REPORT TO THE CONGRESS

099346



BY THE COMPTROLLER GENERAL  
OF THE UNITED STATES



## Policies And Programs Being Developed To Expand Procurement Of Products Containing Recycled Materials

General Services Administration  
Department of Defense

The Government has been asked to provide a market for products containing recycled materials, thereby exercising leadership in conserving energy and natural resources.

Several initiatives have evolved to stimulate the use of recycled materials.

- A program to purchase paper that contains recycled material.
- The issuance of voluntary guidelines for procuring products that contain recycled material.
- @06* --The Energy Policy and Conservation Act of 1975 which promotes the use of recycled oil.

More management emphasis and coordinated programs are needed to further expand the procurement of recycled products.

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COMPTROLLER GENERAL OF THE UNITED STATES  
WASHINGTON, D.C. 20548

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To the President of the Senate and the  
Speaker of the House of Representatives

This report describes the efforts that are being made within the Government to increase use of recycled materials in products purchased by Federal agencies and suggests that more management emphasis should be given to expand the procurement of products that contain recycled materials. The increased use of recycled materials will act to conserve virgin natural resources and energy used in the manufacturing of these products.

The review was made to determine what the General Services Administration and the Department of Defense, two of the largest Government procuring agencies, were doing to encourage or emphasize the buying of recycled products.

Our review was made pursuant to the Budget and Accounting Act, 1921 (31 U.S.C. 53), and the Accounting and Auditing Act of 1950 (31 U.S.C. 67).

Copies of this report are being sent to the Director, Office of Management and Budget; the Administrator of General Services; and the Secretary of Defense.

A handwritten signature in black ink, appearing to read "Thomas A. Blasko".

Comptroller General  
of the United States

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ABBREVIATIONS

DOD	Department of Defense
DSA	Defense Supply Agency
EPA	Environmental Protection Agency
GAO	General Accounting Office
GSA	General Services Administration
OSD	Office of the Secretary of Defense

COMPTROLLER GENERAL'S  
REPORT TO THE CONGRESS

POLICIES AND PROGRAMS BEING  
DEVELOPED TO EXPAND PROCUREMENT  
OF PRODUCTS CONTAINING  
RECYCLED MATERIALS  
General Services Administration  
Department of Defense

D I G E S T

The Congress and the President have expressed an interest in expanding the Federal role in recycling and the procurement and use of products containing recycled materials. In response, several initiatives have evolved to increase the use of recycled materials in products purchased by Federal agencies. These include:

- A General Services Administration program whereby 86 specifications for paper-based products were revised to require various percentages ranging from 3 to 100 percent of recycled fibers. Procurements of over \$66 million have been made under the revised specifications. (See ch. 2.)
- Issuance by the Environmental Protection Agency in January 1976 of voluntary guidelines and procedures to be followed by Federal agencies for procuring products that contain recycled material. The guidelines are intended to be applicable to all agencies that draft specifications for products or procure products using those specifications. The guidelines also apply to products procured by contractors when the Government agency drafts the specifications used by the contractor. (See p. 16.)
- ✓ --Enactment of the Energy Policy and Conservation Act of 1975 which requires the National Bureau of Standards and the Federal Trade Commission to develop and issue test procedures for the recycling of used oil. The act also requires that Federal procurement policies be revised to encourage procurement of recycled oil for both military and nonmilitary use. (See p. 18.)

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There is a need for more management emphasis by the General Services Administration and the Department of Defense to further expand the procurement of recycled products. GAO recommends that the General Services Administration establish a formal program for procuring recycled products and insure that the efforts it has made in purchasing recycled paper-based products are extended to other commodity areas. GAO also recommends that the Department of Defense develop a coordinated program to aggressively promote the procurement of products with recycled material content. (See pp. 8 and 14.)

The General Services Administration told GAO that it will develop formal policies, objectives, and guidelines to establish a permanent recycled product procurement program. The agency also said a continuous review of specifications would be made to identify new areas where requirements for recycled materials can be achieved. (See p. 9.)

The Department of Defense told GAO that it, too, would review its existing policies concerning preparation of procurement specifications to determine what changes can be made at this time to further enhance the use of recycled materials. Defense said it intends to implement the guidelines promulgated by the Environmental Protection Agency wherever possible. (See p. 14.)

The effect that the Environmental Protection Agency guidelines and the Energy Policy and Conservation Act requirements may have on the Federal procurement of recycled products is uncertain at this time. Therefore, the Congress may wish to review progress in this area after Federal agencies have had time to respond to these new initiatives. (See p. 19.)

CHAPTER 1

INTRODUCTION

The Federal Government spends billions of dollars annually for procuring supplies and materials. Two of the largest buyers are the Department of Defense (DOD) and the General Services Administration (GSA). An analysis made by the Office of Management and Budget shows the following actual obligations in fiscal year 1974 and the estimated obligations in fiscal years 1975 and 1976 for the purchase of supplies and materials:

	<u>Fiscal years</u>		
	<u>1974</u>	<u>1975</u>	<u>1976</u>
	----- (000,000 omitted) -----		
Total--Government-wide	<u>\$32,072</u>	<u>\$39,630</u>	<u>\$41,764</u>
Department of Defense	\$25,082	\$31,367	\$32,630
General Services Administration	<u>897</u>	<u>977</u>	<u>1,199</u>
Total--DOD and GSA	<u>\$25,979</u>	<u>\$32,344</u>	<u>\$33,829</u>

The impact of Federal procurement on the economic, social, and national well-being is far-reaching. The sheer magnitude of Federal procurement gives it an importance beyond the interests simply of those who do business with the Government. In this respect, the trend of public and congressional concern about energy has led to recognition that solid waste contains resources potentially recoverable through recycling and various conversion processes. The view has been expressed that Federal procurement could (1) bring recycled products into more widespread use and (2) provide leadership in achieving the two national objectives of conserving energy and conserving natural resources.

BENEFITS DERIVED FROM RECYCLED PRODUCTS

Research and study reports from Government organizations and industry associations have established that several benefits are available to the nation as a whole from recycling materials as opposed to the manufacture and subsequent throw-away of new materials. These benefits include:

- Significant savings in energy because generally the use of secondary materials in production requires less energy than does the use of virgin materials.

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- Conservation of scarce natural resources.
- Reducing the volume of wastes otherwise requiring disposal along with the reduced cost of waste disposal.
- Alleviating balance-of-payments problems and dependency on foreign sources of supply by reducing the volume of materials that are imported.

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With respect to the energy savings that are available from recycling materials, the National Commission on Materials Policy, in its June 1973 report, pointed out that using primary virgin materials consumes more energy per ton of production than secondary materials. Some significant energy savings from recycling cited by the Commission were as follows:

Energy savings from recycling

<u>Material</u>	<u>Energy required</u> (kwh/ton)		<u>Saved by recycling</u> (kwh/ton)
	<u>Using primary sources</u>	<u>Using secondary sources</u>	
Aluminum	64,000	1,300 to 2,000	62,000
Steel	14,000	6,500	7,500
Paper	5,000	1,500	3,500

The Commission estimated that about 2 percent of the total U.S. energy demand could be saved by the recycling of available steel, aluminum, and paper.

5. *Agency:* The Environmental Protection Agency (EPA) reported to the Congress in March 1974 that materials recycled from post-consumer solid waste could possibly provide 8 percent of the aluminum, 7 percent of the iron, 20 percent of the tin, and 14 percent of the paper consumed annually. Benefits cited by EPA, in addition to energy savings, were that use of recycled materials rather than virgin materials generally results in reduced levels of air pollution, water pollution, and industrial and mining wastes. One of the recommendations made in EPA's report was that it should develop guidelines in conjunction with Federal supply agencies for the inclusion of recycled materials to the maximum extent practicable in products purchased by the Government. These guidelines have been issued and are discussed further in chapter 4 of this report.



## CONGRESSIONAL INTEREST

There has been widespread congressional interest in recycling as evidenced by existing law and proposed legislation. Congressional concern for Federal action to stimulate recycling, in late 1970, was manifested by passage of the Resource Recovery Act (Public Law 91-512) which amended the Solid Waste Disposal Act. Section 104(a) of Title I of the Resource Recovery Act directed the Secretary of Health, Education, and Welfare, to carry out an investigation and study in the recycling area. Subsequent reorganization in 1970 created the Environmental Protection Agency which was given responsibility for the studies.

The Energy Policy and Conservation Act of 1975 (Public Law 94-163), sets forth actions that are to be taken by Federal agencies to encourage and promote the use of recycled oil. Additional information on this matter is included in chapter 4 of this report.

Many of the bills related to recycling that have been introduced in the Congress contained a proposal that, in Federal procurement contracts, emphasis should be placed on encouraging and obtaining products containing the largest amount of recycled materials.

## PERSPECTIVE ON THE IMPACT OF FEDERAL PROCUREMENT ON RESOURCE RECOVERY

In February 1975, we issued a report to the Congress entitled "Using Solid Waste To Conserve Resources and Create Energy" (RED-75-326). The report reviewed EPA's progress in the field of resource recovery and recycling since the passage of the Resource Recovery Act of 1970. The report showed that economics was the major element in the success or failure of attaining widespread resource recovery and reuse and identified three major issues affecting the economics of resource recovery which involve the Federal Government.

- Possible discrimination in freight rates, a major cost element for recovered (secondary) materials.
- Taxes which favor virgin materials over secondary materials.
- Federal procurement policy toward products containing recovered and recycled materials.

Concerning the third issue identified, EPA believed that there has not been widespread use of recycled materials on

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federally purchased products. One reason was a lack of technical data on the performance of products containing secondary materials. Another reason advanced by EPA was that Federal agencies rely heavily on industry in setting product specifications and do not know the extent to which industry can or will produce products with a secondary materials content. EPA viewed the use of Federal procurement as an effective means of establishing the technical and economic equivalency of waste-based products.

Another aspect of the procurement issue was the use of Federal leverage as a tool to stimulate demand for recycled products. In this regard, the final report of the National Commission on Materials Policy recommended that the Federal Government exercise leadership by using its purchasing power to provide a market for products made from recycled materials. Although the Federal Government is a large single consumer, Federal expenditures only represent a small fraction of combined industrial, commercial, and personal expenditures in most areas. Therefore, the direct market creation effect of Federal purchasing of waste-based products would probably be small when considered in the aggregate. However, Federal procurement specifications and procurement practices are widely circulated and duplicated by State and local governments and some industries. Therefore, modification of Federal procurement practices could result in more widespread use of recycled materials in other sectors as well. Moreover, Federal purchasing may well have a significant impact on recycled materials demand in localized markets.

#### SCOPE OF REVIEW

The emphasis of our review was on the procurement of recycled products and materials as opposed to internal recycling, collection, and sorting programs or purchase of recyclable items. We reviewed (1) research reports and studies made by Federal agencies and industry to obtain information about recycled products and materials; (2) existing laws and proposed legislation; and (3) pertinent records, and held discussions with officials at GSA and DOD headquarters locations, including the Defense Supply Agency (DSA) and military service branches.

## CHAPTER 2

### GENERAL SERVICES ADMINISTRATION

#### POLICIES AND PROGRAMS FOR

#### PROCURING PRODUCTS CONTAINING

#### RECYCLED MATERIALS

The Federal Property and Administrative Services Act of 1949 created GSA as the focal point for procuring and managing property for civil agencies. GSA is comprised of operating service branches and supporting staff offices and its activities are administered largely by regional and field offices. The service branch responsible for maintaining a Government-wide supply system and developing procurement standards and specifications is the Federal Supply Service.

GSA's procurement standards and specifications are the vehicles by which purchases of recycled products are made and generally include the desired levels of quality, composition, and performance. GSA has estimated that some of its procurement specifications represented over \$66 million in purchases of products containing recycled material. This represents progress in both the purchase of recycled products and in promoting national energy and environmental goals.

The sections below discuss GSA's progress and our conclusions about what more could be done with increased management emphasis.

#### POLICIES AND PROGRAMS FOR PURCHASING RECYCLED PRODUCTS

In a message on the environment to the Congress in February 1970, the President stressed recycling and requested that the Council on Environmental Quality develop proposals on the subject for submission to the Congress. As part of its efforts, the Council sent a letter to major Government agencies requesting that each agency examine its procurement system for means of promoting the use of recycled materials.

As a result of the President's message GSA established an ecology program to coordinate and direct its activities

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having an impact on the quality of the environment. One aspect of this program was to devise language for procurement contracts that would require suppliers to provide products with specified percentages of recycled materials. The intent was to obtain maximum post-consumer waste content in products without sacrificing quality.

Developing appropriate procurement language was a task given to the Office of Standards and Quality Control, within the Federal Supply Service. Individual branches within that office were responsible for a particular group of product specifications. For instance, the Packaging Branch controlled the specifications for boxes, crates, and cartons and the Office Supplies Branch controlled the specifications for envelopes and writing pads. These two branches, along with the Chemicals Branch and the Hardware and Mechanical Branch, comprised the four organizational components with responsibility for substantially all the specifications that had been altered to require a reclaimed material content.

Before each quarterly procurement period, the market was tested by the branch responsible for any product with new or increased reclaimed material percentages that were to be procured. Testing was performed to determine industry capacity to produce the desired reclaimed materials product and industry willingness to bid on that product. Testing was usually accomplished by a telephone survey of, or a mailed questionnaire to, 5 to 15 suppliers of the product. The product specification would then be deviated from for that procurement period to (1) require the minimum percentages of reclaimed materials as revealed by the surveys and (2) insure that competitive bidding was achieved on the contract. Essentially, the specifications were temporarily altered for the amount of reclaimed materials which industry could supply at the time.

GSA officials informed us that deviation memorandums were issued rather than actual specification changes because of the time and expense involved in specification revisions. These officials stated that a saturation point of reclaimed materials content was being sought for each specification. This saturation point may be described as the level of reclaimed fibers that a product specification can require without increasing cost or limiting competitive bidding on the product. Once this saturation point was achieved for the product, the specification would then be permanently rewritten to reflect that level of reclaimed materials content.

According to GSA, product specifications were to be continuously reviewed for potential increases in percentages of reclaimed materials and for other ecological purposes such as removal of lead from paint. We found, however, that guidelines and standardized procedures had not been established for carrying out this review and consequently, it was not being actively pursued by the various branches.

The chief of one branch stated that specifications were not regularly reviewed in his branch for any purpose. He said that changes in reclaimed content usually came about as a result of complaints from paper suppliers, user-agencies, or GSA procurement personnel who were having difficulties with the level of reclaimed content in a particular specification. The official responsible for specification changes in another branch said that no guidelines for review of paper specifications for reclaimed content existed at GSA. Officials in still another branch stated that while their branch had devised its own checklist of paper items for review, specification changes for reclaimed content generally occurred because of paper industry or user-agency complaints.

There were two branches responsible for textile product specifications. Officials in both of these branches indicated that they were unaware of a GSA program to review specifications for potential reclaimed materials content.

#### PROGRESS IN PURCHASING RECYCLED PRODUCTS

As of October 1973, 86 GSA purchase specifications for paper-based products were altered to require various percentages ranging from 3 to 100 percent of recycled material. In addition, specifications for tires and for plastic pipe were altered to permit the use of reclaimed materials at the discretion of the supplier.

The 86 specifications that were altered to require a reclaimed materials content were part of a universe of 136 GSA specifications for paper-based products with a fiscal year 1973 procurement volume of \$92.6 million. The 86 altered specifications represented more than \$66 million or about 72 percent of the dollar volume of paper-based products GSA purchased. GSA has emphasized the paper commodity area because research reports state that paper and paperboard constitute about 50 percent of all solid waste materials.

The above indicates that some progress had been made to encourage paper recycling. However, adequate information

is not readily available to assess the significance of this progress. To do so, a reporting system is needed that would provide data on the total tonnage and dollar value of the products purchased and the type and quantity of recycled material content included in the products.

As previously indicated, GSA provided for use of reclaimed materials in specifications for paper, construction materials, rubber, and plastic. Other commodity areas have been considered by GSA but have not produced specifications that require a reclaimed content because, according to GSA officials, these commodities are already recycled to a large extent or are not recyclable. Metals and glass have been considered but subsequently rejected as having little recycling potential because these commodities were already recycled at or close to the maximum extent feasible by industry as a normal practice. One official said that recycling of textiles was not feasible because there was no such thing as recycled cotton except for wiping rags and because wool can only be recycled in limited amounts in carpeting. Nevertheless, in visits to Department of Defense locations we found that DSA procured textile materials with recycled content and had developed several specifications which allowed up to 35 percent and 15 percent recycled content for wool and cotton respectively. (See p. 12.) Further, research reports of Federal agencies and industry associations indicate that aluminum, copper and brass, zinc, lead, textiles, and rubber products also have recycling potential and should be explored as other possibilities for Federal procurement.

## CONCLUSIONS

GSA has progressed in its efforts to purchase items containing reclaimed or recycled materials--primarily paper and paperboard products. Available information indicates that a greater effort should also be made to increase the recycled material content in other commodity areas. The effort should receive the resources and management attention needed to maximize the procurement and use of recycled products and materials within the Government and to help further conserve our energy and natural resources.

## RECOMMENDATIONS

To maximize the procurement and use of recycled products, the Administrator of GSA should:

- Give emphasis to the GSA program to purchase recycled products with written policies and objectives that earmark the program as a permanent and unified effort. The program should include a reporting system for data to monitor and track progress on the overall actual purchases of recycled products, including the establishment of goals and achievements measured against the goals.
- Issue guidelines to insure a consistent effort in each commodity area to increase recycled material content in product specifications.

#### AGENCY COMMENTS AND OUR EVALUATION

In commenting on our findings and recommendations, GSA stated that it agreed that increasing the procurement of recycled materials was essential in furthering national environmental goals and felt that it has made considerable progress towards this objective.

GSA told us that it will develop formal policies, objectives, and guidelines to establish a permanent recycled product procurement program. It also indicated that guidelines would be issued to require a continuous review of specifications to identify new areas where requirements for recycled materials can be achieved without unduly influencing the quality and cost of the items supplied by the Federal Supply Service. Also, GSA stated that it would review its reporting system for procuring recycled products to insure that it provides sufficient data to monitor the progress made in this area.

We believe that the comments and actions indicated by GSA are responsive to our findings and recommendations, and if properly implemented, should enable GSA to make further progress in its efforts to promote the use of recycled products and materials.

### CHAPTER 3

#### DEPARTMENT OF DEFENSE

#### POLICIES AND PROGRAMS FOR PROCURING PRODUCTS

##### CONTAINING RECYCLED MATERIALS

The Armed Services Procurement Regulation establishes uniform DOD policies and procedures relating to the procurement of supplies and services. DOD's product specifications are designed to insure that the Government receives products that meet its needs. A specification informs the potential contractor of the requirements necessary to supply the Government with an acceptable product. Most DOD specifications are written so that a product must meet a performance or structural design standard rather than specifying material content.

Although some purchases of and research on recycled products have been made, DOD has not developed a coordinated program for the procurement and use of recycled products or materials. The following sections describe in more detail DOD's policies, programs, and progress in the procurement and use of recycled products.

##### POLICIES AND PROGRAMS FOR PURCHASING RECYCLED PRODUCTS

As a result of the President's 1970 message on the environment and a subsequent Council on Environmental Quality request to major Government agencies to promote the use of recycled materials, DOD sent memorandums in 1971 to the various departments and services requesting information on their present and potential capabilities to procure recycled materials. The memorandums also encouraged initiating high priority projects to promote recycling where practical and to develop criteria for identifying products most susceptible to containing secondary material.

While the responses from some of the departments and services indicated the potential for using secondary materials in the products purchased, few provided information on commodities purchased or available with recycled content.

In June 1973, DOD representatives advised the Senate Commerce Committee, Subcommittee on Environment, that DOD's policy for using recycled materials was as follows:



"\* \* \* Where it has been found to be beneficial and practicable, the Department uses recycled materials and will continue to do so."

Although DOD did not have a formal policy and operating directives for the procurement of recycled products and materials, it has looked into changing some of its product specifications to include percentages of recycled material content.

The Army has conducted research into the feasibility of using recycled materials in paper and plastic products. The Assistant Secretary of Defense (Health and Environment) requested DSA to do a study on waste oil recycling. The study was to develop proposals by which DOD might demonstrate leadership in the field of waste oil disposal. As a result, DSA initiated action to acquaint members of the re-refining industry with the various petroleum products the Government purchased that are not restricted to use of virgin base stocks. In addition, the Department of the Army prepared a plan for developing specifications for an automobile engine lubricating oil containing re-refined stocks.

The energy conservation aspects of a petroleum recycling system introduced by DSA's West Coast Defense Depot, Tracy, California, have been noted in the Congressional Record. This petroleum recycling system was an innovative idea which was expected to save over \$16,000 in the first year of operation at the DSA installation. It was also indicated that this recycling process was being called to the attention of the Federal Energy Administration and the Department of the Army in the hope that similar machines and processes could be developed on a larger scale.

The Air Force had initiated a program to promote the use of recycled construction materials in housing projects. A 500-unit housing project in Langley, Virginia, was advertised for bids under the new recycled construction materials program. The program gave special consideration to those contractors specifying the use of recycled construction materials in their building proposals. Before these recycled materials can be used, they must meet minimum Federal Housing Administration standards. As part of the program, the Air Force sent questionnaires to various building material manufacturers requesting information on any recycled construction products they make. Air Force officials examined the responses received and found that the manufacturers of recycled construction materials had compared their products with virgin counterparts as follows: 2 were cheaper and 14 were competitive;

3 manufacturers gave no response to this comparison. None of the manufacturers indicated on the questionnaire that the use of recycled materials would increase the cost of their products.

The other military service branches have no programs in operation similar to the construction materials program of the Air Force. However, all service branches have adopted minimum property standards which permit using recycled materials when they conform to Federal Housing Administration requirements.

#### PROGRESS IN PURCHASING RECYCLED PRODUCTS

There are several isolated instances of DOD procuring recycled materials. Such procurements, however, are not the result of any formal coordination between various DOD departments or service organizations. DOD does not, in many instances, prohibit the procurement of recycled materials; however, it also does not actively seek out those products that do contain recycled materials. Further, it is possible DOD is purchasing products containing recycled materials without being aware of it because most of its product specifications are performance rather than content oriented. DOD personnel contend that procurements for defense use are not generally susceptible to containing large amounts of secondary materials.

There are several military packaging specifications that require using recycled paper. In addition, DSA personnel informed us they procure textile materials containing recycled fibers (wool and cotton) from one commercial manufacturer for shipment to another for processing into final products--primarily military uniforms and blankets. Several of these textile specifications allow up to 35 percent and 15 percent recycled content for wool and cotton, respectively.

The Army Audit Agency, in a study of the Army's Tire Retread program, recommended that the Army purchase retreaded tires for commercial vehicles in lieu of new tires to replace those not recappable in Army retread facilities. The Army, after considering all points, decided not to implement the recommendation because there was no insurance that commercially recapped tires would meet Federal specifications. The Army Audit Agency pointed out, however, that if the Federal specifications were made a part of the procurement package, the Government would have the same insurance as obtained from other procurement actions involving commercial items.

POTENTIAL AIDS TO EMPHASIZING  
PURCHASE OF RECYCLED PRODUCTS

Value engineering

During discussions with DOD and service organization personnel, we were told of a value engineering program that has the potential to directly influence the procurement of recycled products. The program's purpose is to seek better and cheaper ways to perform the procurement mission. We believe that it may be feasible under this program to examine the potential cost and energy savings resulting from the use of recycled materials in the manufacturing process. The results of such an examination may provide DOD management an opportunity to realize savings from procurement of recycled products.

DOD energy directorate

In September 1973 DOD formed an Energy Task Group to concentrate on DOD energy reductions and related matters. The group recommended establishing a directorate for energy under the Assistant Secretary of Defense (Installations and Logistics), which was done in December 1973. In two reports of the task group and the Directorate for Energy, recycled product procurement had not been considered as an effort that could contribute to overall national energy conservation.

CONCLUSIONS

Because of the absence of policies, directives, and formal guidelines we believe the procurement of products made from secondary materials has not been aggressively promoted by DOD. Some progress has been made through isolated recycled product purchases and research programs for revising product specifications to contain recycled materials. However, DOD has not established a coordinated program to procure recycled products on a permanent basis nor emphasized the overall national benefits that could accrue from the procurement and use of recycled products or materials.

We believe that DOD management could further promote the principles of energy and natural resources conservation by emphasizing the procurement of recycled products when military performance specifications are otherwise met.

## RECOMMENDATIONS

We recommend that the Secretary of Defense:

- Issue policy guidelines for the procurement of recycled products when DOD cost objectives, quality, and other DOD requirements can be met.
- Determine the feasibility of giving consideration to recycled product procurement within the Value Engineering program and the Directorate for Energy.
- Assign a single group or office within DOD to have responsibility for the coordination of DOD research and other efforts to procure recycled products. This responsibility may be appropriately considered within the DOD Value Engineering program, the Office of Health and Environment, or the Energy Directorate.

## AGENCY COMMENTS AND OUR EVALUATION

In commenting on a preliminary report, the Department of Defense stated that it was sympathetic to the concept of procurement of recycled materials. However, because this is a discretionary matter under existing law, and is a complicated area requiring the development of additional Government-wide guidelines and extensive product testing, its progress has been slow. DOD stated that EPA has been working with the various Federal agencies to develop voluntary guidelines for increasing the use of recycled materials in products purchased by the Government and once these guidelines are promulgated, DOD intends to implement them wherever possible.

DOD told us that, notwithstanding the absence of the above guidelines, action would be taken to review its existing policies concerning the preparation of procurement specifications to determine what changes can be made at this time to further enhance the use of recycled materials. When engineering, testing, and technological data are available to substantiate a change from virgin to recycled material without sacrificing price or performance standards, there should be no objection to including provisions for such substitution in the specification.

DOD also told us that its Value Engineering Committee will evaluate the feasibility of using recycled materials in value engineering studies and proposals and that a single group or office within DOD will be assigned

responsibility for coordinating DOD's research and other efforts to procure recycled products.

We believe the actions which DOD has indicated will be taken should enable it to develop a coordinated program for the procurement and use of recycled products and materials. The EPA guidelines referred to by DOD have been issued and are discussed further in chapter 4 of this report.

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## CHAPTER 4

### CURRENT EFFORTS TO PROMOTE

### THE PROCUREMENT OF PRODUCTS

### CONTAINING RECYCLED MATERIALS

There are several additional efforts underway within the Federal Government to promote and increase the use of recycled materials in products purchased by Federal agencies. These efforts include (1) guidelines issued by the Environmental Protection Agency for the procurement of products that contain recycled material, (2) actions mandated by the Energy Policy and Conservation Act of 1975 to promote the use of recycled oil, and (3) the establishment of an Interagency Committee on Resource Recovery.

#### GUIDELINES FOR PROCURING PRODUCTS THAT CONTAIN RECYCLED MATERIAL

On January 9, 1976, EPA, pursuant to its authority to issue advisory guidelines which further the broad intents and purposes of the Solid Waste Disposal Act of 1965, as amended, issued guidelines for Federal agencies to follow for purchasing products that contain recycled material.

Although compliance with the procedures recommended in the guidelines is not mandatory for Federal agencies, EPA believes that the guidelines should be applicable to all agencies that draft specifications for products or procure products using those specifications. The guidelines should also apply to products procured by contractors when the Government agency drafts the specifications used by the contractor.

The guidelines set forth recommended procedures that agencies should use to ascertain that the specifications they are responsible for, and the procurement actions that they take, will bring about the increased use of recycled material. The recommended procedures for specification reviews are as follows:

1. All agencies that have the responsibility for drafting or reviewing specifications for products procured by the Federal Government should review those specifications and ascertain whether recycled materials are excluded from the specifications. All specifications with exclusions should be rewritten without the exclusion, unless performance standards would not be satisfied.

2. Any statement in a specification that requires the product to be manufactured from virgin materials should be eliminated, unless performance standards would not be satisfied.
3. All agencies should revise specifications used in purchasing personal and real property so that all specifications require the inclusion of recycled material to the maximum extent practicable.
4. All specifications should be revised if the performance requirements are so stringent that they arbitrarily exclude products that contain the maximum practical amount of recycled materials.
5. The review process should be completed at the next specifications review or at the time of the next major procurement action.
6. Specifications should require recycled material contained in the products to be post-consumer waste whenever practicable or that the recycled material specified contain the highest percentage of post-consumer waste that is practicable.
7. If the inclusion of recycled material to the maximum extent practicable cannot be determined by the specification writer, then the specification should encourage manufacturers to include recycled material to the maximum extent that will still allow the product to meet the performance standards required.

With respect to the actions that agencies should take to procure products that contain recycled material, the procedures set forth in the guidelines state that:

1. Within the constraints of the specification procedures set forth above, and applicable Federal procurement laws and regulations, procurement officials should give preference to the selection of products containing the highest percentage of recycled material.
2. Procurement officials should require that vendors certify the recycled material content, specifically identifying the percentage of post-consumer waste and other recycled material that is in the product.

EPA expects the practices recommended by the guidelines to be no more costly than existing procurement practices in the long term.

#### PROMOTING THE USE OF RECYCLED OIL

The Energy Policy and Conservation Act, signed into law on December 22, 1975, contains a section on actions that are to be taken by various Federal agencies to encourage the recycling of used oil and to promote the use of recycled oil. Recycled oil is defined in the act as re-refined or otherwise processed used oil or a blend of such used oil and new oil determined to be substantially equivalent to new oil for a particular end use.

The determination of equivalency is to be made on the basis of test procedures developed by the National Bureau of Standards and issued by the Federal Trade Commission. The Federal Trade Commission is also required to prescribe labeling standards applicable to containers of recycled oil. Such labeling standards are to permit any container of recycled oil to bear a label indicating any particular end use for which a determination of substantial equivalency has been made.

After the above test procedures and labeling standards are issued, the act requires that Federal procurement policies be revised to encourage procurement of recycled oil for military and nonmilitary uses whenever such recycled oil is available at prices competitive with new oil procured for the same end use.

#### INTERAGENCY COMMITTEE ON RESOURCE RECOVERY

Another means by which Federal agencies are making an effort to improve recovery of resources from waste materials and promote the use of recycled products is through the Intergency Committee on Resource Recovery that was established by the General Services Administration. The Committee (1) is composed of representatives from GSA, EPA, DOD, and other Federal agencies and serves as the focal point for the coordination of ongoing studies; (2) considers potential areas for joint endeavor; and (3) provides advice regarding a concerted effort to increase the quantity and quality of Federal resource recovery.

The first meeting of the Committee was held in February 1975. Six subcommittees were organized so that more than



one area could be pursued simultaneously. The Committee is investigating policy matters which are intended to increase efficient reuse of materials either by recycling or rehabilitation. The Committee will only address problems within the Federal Government and hopes that the actions of the Federal Government can help set an example for the nation.

### CONCLUSIONS

Several significant actions have recently been initiated to stimulate and increase the use of recycled materials in products purchased by Federal agencies. The increased usage of recycled materials will act to conserve virgin natural resources and conserve energy used in the manufacturing of those products. Increased demand for recycled materials will improve the marketability of such material and improve the economic viability of resource recovery from solid waste.

The effect that the EPA guidelines and the Energy Policy and Conservation Act requirements may have on the Federal procurement of recycled products is uncertain at this time. In this respect, the agencies may give the EPA guidelines a low priority because there is no legal requirement for using them. Therefore, the Congress may wish to review the progress in this area after the Federal agencies have had time to respond to these new initiatives and determine if the potential for procurement of recycled products is being properly pursued by the Federal Government.

UNITED STATES OF AMERICA  
GENERAL SERVICES ADMINISTRATION  
WASHINGTON, DC 20405



DEC 10 1975

Honorable Elmer B. Staats  
Comptroller General of the United States  
General Accounting Office  
Washington, DC 20548

Dear Mr. Staats:

Thank you for your letter of September 22, 1975, transmitting your draft report entitled "Formal Policies and Programs Should be Developed to Expand the Procurement of Recycled Products."

We agree that increasing the procurement of recycled materials is essential in furthering national environmental goals and have made considerable progress towards this objective.

We are pleased to provide you, as an enclosure to this letter, our comments to each specific recommendation.

Sincerely,

*Dwight A. Ink*  
Dwight A. Ink  
Deputy Administrator

Enclosure

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ASSISTANT SECRETARY OF DEFENSE  
WASHINGTON, D.C. 20301

14 JAN 1976

INSTALLATIONS AND LOGISTICS

Mr. R. W. Gutmann  
Director, Procurement and Systems  
Acquisition Division  
U. S. General Accounting Office  
Washington, D. C. 20548

Dear Mr. Gutmann:

This is in response to your letter dated September 22, 1975, to the Secretary of Defense, which forwarded the General Accounting Office Draft Report entitled, "Formal Policies and Programs Should Be Developed to Expand the Procurement of Recycled Products" Code 950088 (OSD Case 4172) for comment.

We have reviewed the report, its findings, conclusions and the recommendations made. However, in order that our comments on the recommendations can be fully appreciated, a discussion of our implementation of the Solid Waste Management Act of 1965, as amended by the Resource Recovery Act of 1970, is considered necessary. As you are aware, these Acts are the basis of Federal policies as regards recycled material.

We feel that implementing actions to date within the Department of Defense (DoD) meet the spirit and letter of the law. The emphasis of the DoD environmental quality program addresses pollution abatement, particularly air and water, since this is a mandatory aspect of the law and is geared towards public health, a critically important perspective as compared to recycling.

We are also sympathetic to the concept of procurement of recycled materials. However, in view of the fact that this is a discretionary matter under the law, and a complicated area requiring the development of additional government-wide guidelines and extensive product testing, our progress has been slower. Therefore, our

GSA comments on GAO draft report to the Congress entitled  
"Formal Policies and Programs Should be Developed to Expand  
the Procurement of Recycled Products"

Recommendation. We recommend that the Administrator emphasize the GSA program to purchase recycled products with written objectives and policies that earmark the program as a permanent and unified effort. This program should include a reporting system for data to monitor and track progress on the overall actual purchases of recycled products, such as goals established and achievements measured against the goals.

Comment. GSA will develop formal policies, objectives, and guidelines to establish a permanent recycled product procurement program which will help to achieve maximum procurement of recycled products. Our General Services Procurement Regulations presently contains a reporting system for the procurement of recycled products. However, we will review this system to ensure that it provides sufficient data to monitor the progress of the overall procurement of recycled products and materials.

Recommendation. We recommend that the Administrator issue guidelines to assure a consistent effort in each branch of the Standardization Division to increase recycled material content in product specifications.

Comment. GSA will issue appropriate guidelines to all standardization activities. These guidelines will require a continuous review of specifications to identify new areas where requirements for recycled materials can be achieved without unduly influencing the quality and cost of the items supplied by Federal Supply Service. However, as an interim measure we have discussed with the appropriate specification personnel the importance of continually reviewing specifications to increase recycled material content.

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[See GAO note.]

GAO note: Additional comments made by GSA have been deleted because they were no longer relevant to this report.

effort in that direction must be tempered with a degree of caution until a more favorable climate has been established. By the same token, we recognize that inaction must also be avoided. For that reason, we propose to implement your recommendations to the extent practical, as explained in the accompanying comments.

We appreciate the opportunity afforded us to comment on the report in draft form.

Sincerely,



JOHN J. BENNETT  
Acting Assistant Secretary of Defense  
(Installations and Logistics)

Enclosure  
Comments

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DEPARTMENT OF DEFENSE COMMENTS  
ON  
GAO DRAFT REPORT, CODE 950088

FORMAL POLICIES AND PROGRAMS SHOULD BE DEVELOPED  
TO EXPAND THE PROCUREMENT OF RECYCLED PRODUCTS  
(OSD CASE #4172)

Comments on GAO Recommendations (page 32):

a. The Secretary of Defense issue policy guidelines focusing specific attention on energy conservation benefits by emphasizing procurement of recycled products where DoD objectives, quality and other DoD requirements can be met.

DoD Comment:

While we agree that the issuance of policy guidelines would be a logical step in implementing the use of recycled material in items procured by Defense Agencies, we consider that the recommendation is premature at this time. Standard guidelines for the inclusion of recycled materials in products procured by the Federal Government do not exist at this time. The Environmental Protection Agency who has overall responsibility for administration of the Solid Waste Disposal Act recognizes the need for such guidelines and has been working with the Federal Agencies in developing them. DoD has been directly involved in this effort. Once promulgated, we fully intend to implement the recommended procedures contained therein wherever possible. It should be noted, however, that the substance of the guidelines will be advisory and not mandatory upon Federal Agencies.

Notwithstanding the absence of these guidelines, action will be taken to review our existing policies as regards the preparation of procurement specifications to determine what changes can be made at this time to further enhance the use of recycled material. Where engineering, testing and technological data are available to substantiate a change from virgin to recycled material without sacrificing price or performance standards, there should be no objection to including provisions for such substitution in the specification.

b. The Secretary of Defense determine the feasibility of giving consideration to recycled product procurement within the Value Engineering Program and the Directorate of Energy.

DoD Comment:

The recommendation is concurred in. The DoD Value Engineering Committee will evaluate the feasibility of considering the use of recycled material in VE studies and proposals. Under this program, such proposals would be supported by sufficient engineering and technical data to substantiate that quality and performance is not degraded by the substitution of recycled material.

[See GAO note.]

d. The Secretary of Defense assign a single group or office within DoD to have responsibility for the coordination of DoD research and other efforts to procure recycled products. This responsibility may be appropriately considered within the DoD Value Engineering Program, the Office of Health and Environment or the Energy Directorate.

DoD Comment:

The recommendation is concurred in. Action will be taken to determine where in the organization the responsibility should be assigned.

[See GAO note.]

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GAO note: This information is no longer relevant to this report and has been deleted.

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IN THIS REPORT

Tenure of office  
From To

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ADMINISTRATOR OF GENERAL  
SERVICES:

Jack Eckerd	Nov. 1975	Present
Dwight A. Ink (acting)	Oct. 1975	Nov. 1975
Arthur F. Sampson	June 1972	Oct. 1975
Rod Kreiger (acting)	Jan. 1972	June 1972
Robert L. Kunzig	Mar. 1969	Jan. 1972

DEPARTMENT OF DEFENSE

SECRETARY OF DEFENSE:

Donald H. Rumsfeld	Nov. 1975	Present
James R. Schlesinger	July 1973	Nov. 1975
William P. Clements, Jr. (acting)	May 1973	June 1973
Elliot L. Richardson	Jan. 1973	Apr. 1973
Melvin R. Laird	Jan. 1969	Jan. 1973



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