

United States General Accounting Office 146344

Testimony

Before the Subcommittee on Transportation and Hazardous Materials, Committee on Energy and Commerce, House of Representatives

For Release on Delivery Expected at 2:00 p.m. EST Friday April 3, 1992

SOLID WASTE

146344

Progress in Implementing the Federal Program to Buy Products Containing Recovered Materials

Statement for the Record by
Richard L. Hembra, Director,
Environmental Protection Issues,
Resources, Community, and Economic Development Division



We appreciate the opportunity to provide a statement for the record on the Resource Conservation and Recovery Act (RCRA) program to encourage federal purchases of products containing recovered materials. As you requested, our statement today provides preliminary information developed during our ongoing review for this subcommittee on the (1) Environmental Protection Agency's (EPA) progress in developing procurement guidelines on products containing recovered materials, (2) overall federal progress in implementing the procurement program, and (3) Department of Commerce's role in encouraging the commercialization of resource recovery technologies. As you know, resource recovery is the process of obtaining usable materials from products that might otherwise be discarded.

To put these issues into perspective, the amount of solid waste the nation produces has reached staggering proportions, increasing from 87 million tons per year in 1960 to 180 million tons in 1988, and a projected 216 million tons annually by the year 2000. Most of this waste ends up in landfills, but community landfills are reaching capacity, and it is increasingly difficult to locate new sites. The Congress recognized that the federal government, whose purchases account for about 7 to 8 percent of our gross national product, could play an important role in encouraging the development of products containing recovered materials, thus reducing the amount of solid waste destined for landfills. Consequently, when RCRA was enacted in 1976, the Congress directed federal procuring agencies to purchase items composed of recovered materials and designated other responsibilities to the Office of Management and Budget's Office of Federal Procurement Policy (OFPP), EPA, and the Department of Commerce. OFPP, in cooperation with EPA, is primarily responsible for implementing the federal procurement program. EPA is primarily responsible for preparing quidelines on the availability, relative price, and performance of materials for use by procuring agencies. Commerce's responsibilities included conducting research on specifications for recovered materials and encouraging the development of markets for recovered goods.

In summary, our preliminary work suggests that limited progress has been made in implementing the procurement program. This is because although OFPP and EPA have responsibilities for portions of the program, neither agency has taken an overall leadership role and the program has been a low agency priority.

EPA, because of competing priorities, has been slow in developing guidelines that procuring agencies can use to buy items composed of recovered materials. Although EPA published five congressionally mandated product guidelines between 1983 and 1989, all of these guidelines were issued later than the Congress had directed. While additional recovered materials are either being studied or being considered for study, a formal plan to identify which items should be studied, their relative priorities, and the

resources necessary to carry out these studies, could provide a prioritized approach to EPA's guideline development strategy.

Since guidelines have been issued, some federal agencies have established portions of an affirmative procurement program for purchasing guideline items, but we are aware of only one federal agency to date that has fully developed a program as specified in RCRA. Even if agencies fully implemented their programs, RCRA does not state which agency has responsibility for monitoring the total program or providing the leadership required to resolve problems or assess overall program effectiveness, and no agency has taken on these responsibilities. In addition, OFPP's efforts to obtain program data have not been sufficient to determine the overall effectiveness of the program governmentwide. The Council on Federal Recycling and Procurement Policy was established by the President in October 1991 to review and report on agencies' actions. While the Council has some leadership authority, it has not been vested with specific responsibilities to resolve problems that hinder program success, assess individual agency efforts, or determine the program's overall effectiveness. The Council has yet to determine how it will carry out its duties.

Finally, the Department of Commerce has not initiated any work in response to RCRA since 1982, when it stopped requesting and receiving funds for RCRA activities. In summarizing the results of its work at that time, Commerce stated that it had substantially fulfilled its mandated responsibilities and transferred further efforts in this area to the private sector. However, there are indications that a renewed role for Commerce could be useful as new resource recovery technologies emerge and as additional items are considered for procurement guidelines.

Before I develop these issues in more detail, let me briefly discuss the requirements to encourage the purchase of recovered products.

BACKGROUND

The purpose of the federal program to purchase products containing recovered materials is to encourage the development of adequate markets for recovered materials. With adequate markets, resource recovery would serve as a strategy for reducing the volume of waste needing disposal. The House Interstate and Foreign Commerce Committee, in drafting the legislation, believed that federal purchasing power would stimulate a demand for recovered materials and motivate state and local governments and private industry to follow suit by using greater amounts of recovered materials.

RCRA section 6002 requires EPA to identify products that are or can be produced with recovered materials and to issue guidelines that procuring agencies can use when purchasing these products.

EPA is to consider (1) the item's availability or supply, (2) the impact the item's purchase would have on the volume of waste for treatment and disposal, (3) the economic and technological feasibility of producing and using the item, and (4) other uses for this recovered material.

A federal agency that procures a guideline item is required, within 1 year after the guideline's issuance, to establish an affirmative procurement program. An affirmative procurement program must ensure that items composed of recovered materials will be purchased to the maximum extent practicable. Procuring agencies are not required to purchase specific guideline items if they are not available within a reasonable period of time or at a reasonable price, or if the items do not meet the agencies' performance standards or specifications.

OFPP is responsible for coordinating the federal program to buy recovered products with other federal procurement policies and to periodically report to the Congress on actions taken and progress made in implementing the program. The Office, in cooperation with EPA, is responsible for implementing program requirements.

The Department of Commerce was responsible early in the program for developing specifications for recovered materials, stimulating development of markets for recovered materials, promoting proven resource recovery technologies, and providing a forum for the exchange of technical and economic data relating to resource recovery facilities.

The President signed Executive Order 12780, effective October 31, 1991, which reemphasizes, among other things, the policy of purchasing items containing recovered materials. The order establishes a Council on Federal Recycling and Procurement Policy, chaired by a senior EPA official, and includes representatives from OFPP, EPA, the Council on Environmental Quality, the General Services Administration, the National Aeronautics and Space Administration, and the Departments of Defense, Commerce, Energy, and the Interior. The order also requires executive branch agencies to report to EPA, by April 30, 1992, on their adoption of affirmative procurement programs, to annually review their programs' effectiveness, and to report their findings to EPA and OFPP, beginning with a report covering fiscal year 1992.

EPA RESPONSE TO CONGRESSIONAL MANDATE

EPA had not issued any product guidelines between 1976 and 1980. Therefore, in 1980 the Congress directed EPA to issue five guidelines: three, including one for paper, by May 1981; and two, including one for construction materials, by September 1982. However, EPA only issued a guideline for construction materials (cement and concrete containing fly ash) in January 1983. In 1984

the Congress extended the paper deadline to May 1985 and required the remaining three guidelines, including one for retread tires, by October 1985. EPA was again unable to meet these deadlines. The paper guideline was finally issued in 1988, following a lawsuit that charged EPA with only issuing one of the five congressionally directed guidelines. The lawsuit was settled, and EPA agreed to issue the remaining guidelines according to a schedule established in the consent decree. The three remaining guidelines were issued shortly thereafter: lubricating oils in June 1988, retread tires in November 1988, and building insulation containing recovered materials in February 1989.

According to an EPA official and an EPA contractor working on guideline development, EPA was unable to meet the congressionally mandated deadlines because it viewed the issuance of guidelines as a lower priority than other EPA programs, such as the management of hazardous waste. We were told that up until 1984 the guideline development program was run by a staff of five people, who, because of other responsibilities, only worked part-time on the program. From 1984 to 1989, EPA officials noted that only one person, full-time, oversaw guideline development, which included overseeing contractors who conducted feasibility studies (necessary before guidelines are issued) of potential guideline items and preparing draft guidelines. The 1988 lawsuit provided the leverage needed to encourage EPA to issue the remaining congressionally mandated guidelines.

Currently, EPA is exploring other items made from recovered material that could result in the publication of additional procurement guidelines. For example, EPA is currently developing guidelines for

- -- fiberboard made from recovered paper,
- -- hydromulch made from recovered paper,
- -- geotextiles made from recovered plastic, and
- -- plastic pipe made from recovered plastic.

In addition, according to EPA officials, the agency is conducting feasibility studies on compost made from yard waste and rubber asphalt made from tires to determine if these recovered products meet EPA's selection criteria, such as whether the products have technically proven uses.

EPA has also studied other items made from recovered material to determine if guidelines would be appropriate. Some items-lead batteries, construction materials made from recovered aluminum and metals, and flooring made from recovered materials--were considered but not chosen for guideline development because these

¹Environmental Defense Fund v. Thomas, No. 87-CV-3212-SS (S.D.N.Y. Apr. 8, 1988).

items were already being extensively recovered or because of a supply problem. Other items--such as glass asphalt, additional plastic items, recovered concrete, and recovered asphalt--have also been studied. According to EPA officials, EPA would like to develop guidelines for these items but resource constraints prevent it from doing so at this time. EPA has not yet determined what additional items might warrant study for future guidelines.

Because EPA has not developed a plan that could be useful for identifying and setting priorities for future guideline development, it does not know what resources would be necessary to complete feasibility studies or to develop guidelines. According to an EPA official, the agency has not taken these actions because the program has been a low priority in EPA with limited funding and staff. All of EPA's efforts have focused primarily on meeting the congressionally mandated time frames for the five guidelines issued to date. Now that the guidelines have been issued, the official stated that EPA is considering putting a system in place to determine funding and staff needs, goals, and a systematic approach to issuing procurement guidelines. However, this official did not have specific information on this effort.

FEDERAL PROGRESS IN IMPLEMENTING THE PROCUREMENT PROGRAM FOR RECOVERED MATERIALS

RCRA requires federal procuring agencies to establish an affirmative procurement program for guideline items that contain, at a minimum, four basic elements: (1) a preference program for buying products containing recovered materials, (2) a promotion program to actively encourage buying recovered products, (3) a program for requiring estimates of the total percentage of recovered material used in contracts as well as a means for certifying and verifying these estimates, and (4) annual reviews and monitoring to determine program effectiveness.

While some federal agencies have portions of an affirmative procurement program for the procurement quideline items, we are aware of only one agency, the Government Printing Office, that has all four elements of an affirmative procurement program in place. According to officials from the General Services Administration's Federal Supply Service and EPA, both agencies have some of the necessary program elements but have yet to initiate annual reviews and monitoring of all quideline items purchased. A recent survey of 17 executive branch agencies conducted by the Subcommittee on Oversight of Government Management, Senate Committee on Governmental Affairs, found that many of these agencies rely on a central procurement agency, such as the General Services Administration, to purchase items, and therefore the agencies saw no need to develop procurement programs. Procurement officials we spoke to from the Departments of Interior and Health and Human Services noted that they had not received specific guidance on how to develop an affirmative procurement program nor on methods to

assess program effectiveness. We are still collecting information, however, on (1) the reasons agencies have made limited progress in developing and implementing these required programs and (2) whether relying on central procurement agencies, such as the General Services Administration, to purchase guideline items containing recovered material, is feasible.

OFPP is required to report periodically to the Congress on the program's progress. To accomplish that requirement, OFPP requested agencies in 1977 to report annually and then biennially beginning in 1984, on progress made to maximize the use of recovered materials. However, because OFPP had not issued guidance on what these reports should contain until recently, past reports do not indicate the progress made in procuring the guideline items. The information reported to OFPP often contained irrelevant data, such as the status of agencies' in-house recycling programs and sales of items to private industry for recycling, as opposed to information on the procurement of products containing recovered materials. Reported data were also inconsistent from agency to agency and from year to year. Consequently, OFPP's biennial reports to the Congress did not contain sufficient information to assess overall program effectiveness.

In January 1992 OFPP issued reporting guidance for the agencies' biennial reports covering calendar years 1990 and 1991. While this quidance is a necessary first step to determine if agencies have an affirmative procurement program to measure program effectiveness, it alone may not ensure that agencies report the data necessary to accurately reflect program effectiveness. is because such data do not appear readily obtainable. example, according to officials from the Departments of Housing and Urban Development, the Interior, and Health and Human Services, their agencies do not have a centralized data system capable of capturing the detailed data requested in the January 1992 reporting auidelines. The data systems do not specify if items contain recovered materials and only include purchases over \$25,000. addition, Health and Human Services procurement officials stated that their construction contracts do not detail the amount or value of concrete used in a project. As a result, the amount and value of concrete purchased containing fly ash cannot be reported to OFPP.

EPA, OFPP, and other federal agencies have program responsibilities under RCRA. However, RCRA does not designate a single agency with specific responsibility for ensuring that agency programs are implemented, program effectiveness is assessed, and changes are instituted if a determination is made that the overall federal effort is not achieving program goals. The Council on Federal Recycling and Procurement Policy, established by executive order in October 1991, may perhaps be an effort to clarify program leadership. The Council, headed by a federal recycling coordinator, is to review actions taken by agencies to comply with

procurement requirements and to annually report this information to the Office of Management and Budget. The Council's duties include (1) identifying and recommending initiatives that will promote federal agency recycling, including the development of incentives to encourage the purchase of products made from recovered materials; (2) reviewing agency specifications and standards and recommending changes that will enhance federal procurement of products made from recovered materials; (3) collecting and disseminating information on current market sources and prices of products produced with recovered materials; and (4) providing agencies with guidance and assistance in setting up and reporting on their programs. Although the Council has been given some general leadership authority as set out above, it is not vested with any specific responsibilities to resolve problems that hinder program success, assess individual agency efforts, or determine the program's overall effectiveness. As of February 1992, the Council had yet to decide how it would carry out its duties or what actions it would take to fulfill them.

Agency officials we talked to generally agree that OFPP should be responsible for governmentwide program leadership and oversight. According to procurement officials at EPA, Housing and Urban Development, the General Services Administration, and Interior, OFPP should provide overall program leadership and oversight as agencies implement affirmative procurement programs because of OFPP's procurement expertise and position in the Executive Branch. A senior OFPP official told us that OFPP agrees that it should exercise leadership on procurement policy. Technical leadership for recycled materials requirements, however, must continue to be vested in EPA or another technical agency. He added that OFPP staff do not have the technical knowledge required to develop product specifications and OFPP is specifically prohibited by the OFPP Act from interfering in determinations by executive agencies regarding the need for or use of specific products.

COMMERCE'S ROLE IN RESOURCE RECOVERY

Under sections 5002 and 5003 of RCRA, the Secretary of Commerce is to (1) publish guidelines for the development of specifications to classify waste materials, (2) work with national standards-setting organizations to publish, promulgate, and update standards for recovered materials and their use by the public and private sectors, (3) identify the geographical location of existing or potential markets for recovered materials, (4) identify economic and technical barriers to the use of recovered materials, and (5) encourage the development of new uses for recovered materials.

Between 1976 and 1982, Commerce operated an Office of Recycled Materials within the National Bureau of Standards to fulfill these and other mandated requirements. The Office provided information for developing specifications to classify materials that could be recovered from solid waste, examined the marketability of various

components of municipal solid waste, studied the potential for producing fuels derived from refuse, produced a study of recycled product procurement in seven states, and published a national directory of recycled product manufacturers. The directory was designed to assist individuals, organizations, government, businesses, and institutions in their recycling efforts by providing information on markets for secondary materials. In its final report, the Office stated that there was a strong demand for the directory, and an updated version was released in early 1983.

In its fiscal year 1983 budget request, Commerce proposed terminating the recycled materials program to comply with an administration directive to prioritize National Bureau of Standards work. Among other things, priorities were to be based on (1) the relationship of the work to the original mission of the Bureau, (2) possible alternative sources of funding, and (3) the work's relative importance with respect to other Bureau programs. The Bureau Director stated in testimony before the House and Senate appropriations committees that the major objectives of the resource recovery program had been sufficiently achieved so that it was appropriate for the private sector to continue further efforts. The Congress did not appropriate further funds. The program (funded at \$740,000 in 1982, with 7.5 full-time equivalent positions) was abolished at the end of fiscal year 1982.

Commerce currently has no work under way as a result of the federal program to purchase recovered materials. However, as part of its mission to help U.S. companies compete internationally, Commerce has undertaken related work, including a study of the impact of recycling on the rigid container industry and an ongoing analysis of domestic and foreign wastepaper consumption prospects. In addition, Commerce participates in the technical committees of national standards-setting organizations.

In light of EPA's recent progress in developing and issuing procurement guidelines, a renewed, continuing role at Commerce with respect to resource recovery could be useful. The Congress envisioned that Commerce's role would occur at the same time as EPA developed guidelines and federal agencies implemented them, but the Office of Recycled Materials had disbanded by the time EPA's first guideline was issued. Meanwhile, RCRA requires EPA to consult with Commerce during the quideline development process. RCRA also specifies that the quidelines shall provide information as to the availability, relative price, and performance of recovered materials and items containing such materials--information Commerce would be in a good position to obtain through its expertise and industry contacts. According to an EPA contractor working on quideline development, because Commerce does not provide the industry and market data needed, EPA must independently develop this information, while studying potential items for possible quideline development.

A number of individuals and groups have identified needs that they believe Commerce, as opposed to EPA, is best suited to fulfill with respect to RCRA. For example, an EPA contractor who develops procurement quidelines told us that Commerce could periodically update a list of recyclable materials, specifying who is using them (and to what extent) and who could use them. The contractor also said that guideline development would be facilitated if Commerce had a focal point to direct the contractor to the latest pertinent market and technical information. A co-chairman of the Market Development Committee at the National Recycling Coalition told us that it would be helpful if Commerce studied the incentives needed for manufacturers to establish facilities that use recycled products, such as de-inking facilities, which are important for recycled newsprint. The former director of Commerce's Office of Recycled Materials told us that Commerce is the logical place to focus a federal effort to strengthen the markets for recycled materials, but in order for a renewed effort at Commerce to be successful, support and leadership are required at the highest levels.

Some of the recovered materials work that Commerce conducted between 1976 and 1982, if updated, could be used today to support national, regional, and local efforts in increasing the use of recovered materials. For example, an updated version of the 1983 national directory of manufacturers could help federal, state, and local governments procure products made from recycled materials and could help community recycling programs locate the best markets for their recovered materials. An update of the 1981 study of recovered product procurement in seven states could also aid in furthering program objectives. The update could include a survey to determine which states, cities, or regions are the most successful in procuring recycled items and materials and the reasons for their success.

OBSERVATIONS

Our work to date suggests that EPA, the Congress, and other interested parties are not in a position to determine the effectiveness of EPA's efforts to foster federal agencies' purchase of items containing recovered materials. This may be attributed to the fact that EPA lacks a specific plan of action, with measurable goals, tasks and milestones, as well as a clear delineation of roles and responsibilities and necessary resources. Such a plan could provide a prioritized approach to EPA's guideline development strategy.

Our preliminary information also indicates that the program, from 1976 through 1991, has been hampered by the lack of clear guidance and leadership. OFPP's recently issued reporting guidelines are intended to assist in obtaining some basic information on the status of agencies' affirmative procurement programs. In addition, the Council will, to some extent, provide a

forum for discussion and possibly take on some leadership roles. Because these are new initiatives and details need to be worked out, it is too early to tell to what extent these changes will result in the type of guidance and leadership the program requires to fully succeed. Early feedback from agencies on the OFPP reporting guidelines indicates problems with implementing the guidelines because of limitations on the availability of the required information.

As OFPP attempts to fulfill its reporting responsibilities, and the Council further defines its role, it would be useful to clarify overall leadership responsibilities for (1) ensuring that federal procuring agencies are properly covered by affirmative procurement programs that include all required elements, (2) working with federal agencies that are having difficulties with their programs and developing guidance for agencies to use in determining their programs' effectiveness, and (3) determining whether agencies are properly implementing that effectiveness guidance.

EPA's current work in considering additional items for procurement guidelines, as well as the development of new resource recovery technologies since 1982, indicate that Commerce could assist both government procurement agencies and industry by renewing some efforts to stimulate the markets for recovered materials. Possible tasks for Commerce to undertake include developing and disseminating up-to-date market and technical information on the uses of recovered materials and identifying the types of incentives needed to spur investment in the recovered materials markets.

In a report we plan to issue later this year on federal procurement of recovered materials, we anticipate providing more specific information, and possible recommendations, on the issues addressed in this statement.

(160127)

Ordering Information

The first copy of each GAO report and testimony is free. Additional copies are \$2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendents of Documents, when necessary. Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

U.S. General Accounting Office P.O. Box 6015 Gaithersburg, MD 20877

Orders may also be placed by calling (202)275-6241.

United States General Accounting Office Washington, D.C. 20548

Official Business Penalty for Private Use \$300 First-Class Mail Postage & Fees Paid GAO Permit No. G100