



RESOURCE RECOVERY
**TECHNOLOGY
 UPDATE**
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Office of Solid Waste Management Programs

**THE RESOURCE CONSERVATION AND RECOVERY ACT
 OF 1976: HOW WILL IT IMPACT ON RESOURCE
 RECOVERY AND CONSERVATION?**

By

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On October 21, 1976, the Resource Recovery and Conservation Act of 1976 was signed into law as Public Law 94-580. The authorities provided by the Act are far broader than suggested by the title. The new regulatory authorities on hazardous wastes management, the closing of open dumps and the creation of environmentally sound sanitary landfills for other wastes are the major new thrusts of this legislation. The 1978 funding authorizations are:

	<u>FY 78 Authorizations (million dollars)</u>
General Authorization Hazardous Waste Management Programs (Subtitle C)	40
State Planning Programs (Subtitle D)	25
Implementation Grants (Subtitle D)	30
Rural Assistance Grants (Subtitle D)	15
Special Grants (Subtitle D)	2.5
Research, Development, and Demonstration (Subtitle H)	35

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True to its title, the Act contains several significant provisions, which, if carried out as proposed, would stimulate implementation of resource recovery and resource conservation. These provisions include technical assistance, elimination of open dumping; research, development, and demonstration; a Cabinet-level Resource Conservation Committee; and federal procurement.

Technical Assistance

Section 2003 of the Act calls for establishment of Resource Recovery and Conservation Panels. This section requires that EPA provide teams of personnel to provide States and local governments, upon request, with technical assistance on solid waste management, resource recovery, and resource conservation. The teams are to include technical, marketing, financial, and institutional specialists. Their services would be provided without charge to States or local governments. The Act mandates that not less than 20 percent of the general appropriation for the Act must be used for the panels.

The concept of technical assistance is not new to the federal solid waste program, but the specific *requirement* that multidisciplinary assistance be provided and that a significant portion (20 percent) of the budget be allocated to this activity clearly indicates Congress' intent to expand and emphasize this activity.

Technical assistance has been viewed by EPA as an activity which will alleviate the constraints EPA sees as inhibiting the progress of resource recovery implementation. The marketing, financial, contractual, and legal realities of resource recovery are unique

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and, thus, unfamiliar to many municipalities. The technologies and techniques which must be employed are, in many cases, not fully developed and in most cases, not well understood by municipal governments. Source separation and waste reduction are often overlooked as alternatives. Technical assistance can be a valuable asset to municipalities in addressing these issues.

EPA has carried out technical assistance in the past, with generally impressive results for a modest effort. The expanded authority provided in the Act provides the potential for far more impressive impacts through greater resources. Furthermore, this mandate can be implemented and expected to show results more quickly than many of the other resource recovery provisions. It is precisely the kind of activity which EPA, as well as others who testified before Congress on this legislation, felt was needed at this time.

The exact manner in which EPA will carry out this mandate is still being developed. However, it seems clear that EPA regional offices and private consultants under contract to EPA will play major roles.

State Plans/Elimination of Open Dumping

Guidance and financial assistance for development of state solid waste plans is authorized in Subtitle D of the Act. Although generally not thought of as a resource recovery provision, Subtitle D could be one of the most significant in terms of impact on resource recovery.

The stated objective of Subtitle D is to "assist in developing and encouraging methods for the disposal of solid waste that are environmentally sound and that maximize the utilization of valuable resources and encourage resource conservation." Authorities that relate directly to resource recovery include guidelines for development of plans, technical assistance, and implementation grants.

The guidelines for plan development are advisory rather than mandatory. However, they offer a significant new opportunity for EPA to provide assistance to States in determining how resource recovery and conservation can fit into their overall solid waste management plans. This is particularly true when the provisions of Subtitle D for technical assistance and implementation grants are included.

The states and their designated solid waste regional agencies stand as major potential recipients of the technical assistance panel program required in Section 2003. Together, the guidelines and technical assistance can be of significant benefit to the states in their development and implementation of plans.

The provision for implementation grants carries this one step further. Implementation grants can be provided to carry out specific solid waste management and resource recovery programs. This assistance can include "planning and feasibility studies; consultation; surveys and analysis of market needs; marketing of recovered resources; technology assessments; legal expenses; construction feasibility studies; source

separation projects; and fiscal or economic investigations or studies." No construction expenses are allowable, however.

The greatest benefit to resource recovery is likely to be the provisions of Subtitle D which relate to land disposal. By October 21, 1977, EPA is required to develop criteria defining open dumps and sanitary landfills. Within one year of promulgation of these criteria, States are required to publish an inventory of open dumps. One of the requirements for EPA approval of State plans (and subsequent approval of financial assistance) is that the plans provide a schedule for closing or upgrading of all open dumps.

Although states can have as long as five years from the date of publication of the inventory to upgrade or close open dumps, the Act suggests that this time frame is allowable only when other alternatives to these dumps cannot be employed more quickly. This provision may be an inducement for citizens to bring suit to close open dumps.

The removal of environmentally unacceptable land disposal will eliminate an unrealistically low cost alternative for waste disposal that has limited the attractiveness of resource recovery to municipalities. Therefore, the regulation of land disposal should provide a major new incentive and opportunity for resource recovery.

Research, Development, and Demonstrations

This act is similar in RD&D authorities to its predecessor, the 1965 Solid Waste Disposal Act as amended by the Resource Recovery Act of 1970. EPA is authorized to provide financial support for research, development, and demonstration of promising techniques for recovery of resources from solid waste. Grants or contracts to public agencies or the private sector are permitted. In addition, EPA is directed to enter into contracts to provide monitoring of full-scale solid waste facilities, whether or not partially funded by EPA.

The major differences between this and the previous Act in this regard are the following: 1) Under the new Act, it is possible to contract directly with the private sector for construction of full-scale demonstration facilities, in addition to making grants to municipalities; 2) The evaluation by EPA of municipally or privately owned facilities is unique to the new Act; 3) The Act specifically authorizes construction of pilot plant facilities; 4) The funding authorizations in this Act are somewhat larger than those in the previous law; i.e., the new legislation authorizes \$35-million for these and other provisions of Subtitle H.

In addition to these "hardware" provisions of Subtitle H, several studies are mandated. One study will evaluate small-scale and low technology recovery techniques, including source separation of solid waste. Similarly, a study of the compatibility of source separation and high technology resource recovery systems is mandated.

The impact which these provisions may have on development of resource recovery technology will de-

pend largely on the *appropriations* provided for Subtitle H. Appropriations can be for the full amount authorized, but frequently are less. Appropriations are not expected before late spring.

One of the most significant resource recovery provisions of the previous solid waste act, the Resource Recovery Act of 1970, was the authorization for full-scale demonstration facilities, Section 208. Approximately \$20-million was ultimately appropriated under Section 208. One might guess that demonstration appropriations under the Resource Conservation and Recovery Act would, at best, be of similar magnitude *if* significant appropriations are made. Even if the full authorization of \$35-million is appropriated, the funding will be sufficient to support only two or three demonstrations of limited scale, several source separation demonstrations, and research and development support studies. However, even this level of funding is uncertain.

The new Act did not provide funding for construction grants, loans, or loan guarantees to subsidize the construction of resource recovery facilities. A loan guarantee provision was included in early drafts but was dropped because of convincing arguments and evidence that well-conceived resource recovery projects were already attractive to municipalities and could be financed without federal involvement.

Resource Conservation Committee

Economic inequities of the marketplace that discriminate against recycled resources have long been recognized as one of the major impediments to resource recovery. A number of incentives have been proposed to Congress, but none have been acceptable.

The Resource Conservation Committee is a Cabinet-level committee, chaired by the Administrator of EPA and comprised of the Secretaries of Commerce, Labor, Treasury, and Interior, as well as the Chairman of the Council on Environmental Quality and a representative of the Office of Management and Budget.

The Committee is charged with analyzing and reporting recommendations to Congress on a wide range of incentives and disincentives to foster resource recovery and conservation. This includes analysis of the effect of removing existing subsidies and allowances for virgin materials. It also includes a specific mandate to evaluate the feasibility of employing solid waste management charges (product charges) that reflect the costs of collection, disposal or recovery of products.

The high-level representation of this committee, as well as the specificity of its mission, suggest that Congress is serious about correcting the economic inequities that have restricted resource recovery in the past.

Results of this committee are required to be reported to Congress by October 1979. If an economi-

cally efficient incentive package is developed that is attractive to Congress, a major change in resource recovery markets could result.

Federal Procurement Guidelines

The failure of the federal government to provide leadership in the procurement of products manufactured from recycled resources has long been pointed out as a failure in federal leadership. Section 6002 of the Act requires widescale federal leadership in procurement of such products. Agencies are instructed to eliminate any bias in specifications against products containing recycled materials and to procure products containing the highest percentage of recycled materials practicable. Associated with this mandate is a requirement that EPA write guidelines to aid federal agencies in complying with this mandate. These guidelines will, in essence, clarify the potential and opportunities for such procurement.

Federal purchases alone constitute only a small percentage (less than 2 percent) of the total national consumption of any given product. However, the potential for such practices being adopted by state and local governments is significant. If this "ripple effect" takes place, the result could be an important expansion in the market for recovered resources.

Conclusions

The problems and constraints inhibiting a more rapid rate of resource recovery implementation are addressed appropriately in the Resource Conservation and Recovery Act of 1976. Federal funding programs for plant construction were not included in this legislation.

However, a need to provide technical assistance was well satisfied in the Act. Authorities to continue technology research and development were needed and were provided. The significant issue of economic inequities between virgin and recycled resources, though not resolved by the Act, was addressed in a way that suggests that in two to four years, a legislative solution could emerge. Cheap, but environmentally unacceptable land disposal, is clearly on its way out, thus enhancing the potential for resource recovery. The federal house will at last be put in order as the result of new requirements relating to procurement, and the implementation of previously issued guidelines for mandating recovery of both materials and energy.

Yet, though the authorities are generally correct, the overall impact is still uncertain. The level of resources ultimately to be appropriated by Congress is still not determined. Within the Agency, the realities of having to issue regulations required in the Act by mandated deadlines, tend to direct attention and resources to those activities. ■