

solid waste management

worldwide solid waste literature

collection/retrieval services

available from EPA



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WORLDWIDE SOLID WASTE LITERATURE

COLLECTION/RETRIEVAL SERVICES

AVAILABLE FROM EPA

This publication (SW-636) was written
by JOHN A. CONNOLLY
and supersedes SW-91.2 (order No. 294)

U.S. ENVIRONMENTAL PROTECTION AGENCY

1977

3d Edition
with revised title and cover
as well as minor revisions
to the text and new graphics

An environmental protection publication (SW-636) in the solid waste management series

SOLID WASTE MANAGEMENT; WORLDWIDE SOLID WASTE LITERATURE
COLLECTION/RETRIEVAL SERVICES AVAILABLE FROM EPA

by John A. Connolly*

The status of solid waste management today is illustrative of the environmental transition which our country is attempting to make--a transition from an era of the random and careless use of resources, accompanied by equally aimless and damaging disposal practices, to an era of resource conservation, accompanied by environmental awareness and the foresightful use of technology.

Federal attention was first placed on the problem in 1965 with passage of the Solid Waste Disposal Act, which authorized the creation of a modest program of technical assistance to States, local governments, and interstate agencies for planning and developing solid waste management. The 1965 Act also promoted national research programs to find better methods for controlling, processing, recovering, and recycling wastes and for disposing of residues.

In 1970, this Act was amended by the Resource Recovery Act, which stressed the need to develop resource recovery in solid waste management. It required, also, a comprehensive investigation of hazardous waste management practices in the United States. The Resource Conservation and Recovery Act of 1976, Public Law 94-580, fosters attention to all aspects of solid waste management.

Availability of information is essential to the advancement of any field. The Act contains many provisions for developing and disseminating solid waste information. It requires EPA to establish a central solid waste management reference library, and to collate, analyze, and publish the information collected for the library. Rapid information dissemination is also required of EPA, as well as programs to educate the public on solid waste management issues.

Rarely has Federal legislation delineated in such detail the particulars of information activities at the program level. We do not yet know what funding and manpower will be available for implementing the new legislation, but we expect that considerable strengthening and expansion of current information efforts will now be possible.

EPA currently reports on the results of all solid waste activities undertaken by its Office of Solid Waste by means of EPA publications, through articles by EPA authors appearing in various journals, and in the publications of the National Technical Information Service of the U.S. Department of Commerce.

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The primary mission of EPA's solid waste information retrieval system is to collect and disseminate information on technological developments from the world's literature on solid waste management. This is accomplished by a continual scanning of the world literature for input, in the form of indexed abstracts, storage by computer, and output, again in the form of abstracts. In accomplishing this mission, we coordinate our activities with other Federal information systems and libraries, State and local systems, the World Health Organization, and Environment Canada.

Users of technical information are very much aware of the growth of excellent, specialized libraries and information retrieval systems within industry over the past three decades. In facing the same technical information needs for the users of data developed in government activities, in the past 20 years both Federal and State governments have expanded existing libraries and added industry's concept of computer utilization, microforms, and the field of information science. Like specialized libraries, there have come into being specialized information retrieval systems. The U.S. Environmental Protection Agency's solid waste information retrieval service embraces both of these specialized functions.

The information retrieval services program is composed of two elements: the solid waste information retrieval system (SWIRS) and the library. The library and SWIRS are already meeting the requirements of the new Act to a limited degree in that a central reference library is already established and that the information is being collated, analyzed and made available through SWIRS.

SWIRS has an information bank of abstracts retrievable through the use of keywords. The library contains all of the documents abstracted for input to SWIRS and provides interlibrary loan services to established libraries. The combined services are available to the scientific and technical community throughout the world. Presently the day-to-day operations of the SWIRS and library are performed by a contractor, but are fully monitored and managed by the Chief of the information retrieval program.

The operations include: (1) continuous input of the world's literature, (2) full library services, (3) publication of monthly abstract bulletins, reflecting key literature abstracted in that month, indexed, with cumulative index volume at the end of each year, (4) response to inquiries for literature searches.

SWIRS

SWIRS consists of a vast collection of worldwide literature relevant to solid waste management. Materials selected for the information bank are retrievable through use of a list of keywords, by automated means. Although the collection is primarily scientific and technical, nontechnical information is also available. Users of SWIRS include Federal, State, and local agencies in the United States and abroad as well as members of the

general research and development community, consulting engineers, attorneys, students, citizen and civic groups and environmental organizations.

Data Base

Documents to be entered in SWIRS are drawn from a wide variety of published sources (Figure 1). The world's periodical literature in this field is comprised of approximately 700 primary titles. Other sources for the information bank include patents and such nonperiodical documents as conference papers, books, technical reports, monographs, and laws. Additional sources are EPA personnel and other key persons working in the field of solid waste management in government, industry, and universities. Although this coverage is extensive, we recognize that no amount of effort will identify all pertinent documents. SWIRS therefore welcomes suggestions from any source for additional materials that should be made available to the system's users.

After selection of documents and during input preparation, specific keywords describing the documents are assigned; these keywords are drawn from SWIRS' thesaurus of terms. There are also 30 major categories in this system designed primarily as a table of contents for our monthly abstract bulletin but also available as a search tool for broad subject coverage. The literature abstracted is primarily from non-OSW-generated sources, and is retrievable under the following category searchable elements:

AGRICULTURAL WASTES	HEALTH/SAFETY	Municipal refuse
Crop residues	INCINERATION	Scrap metal
Manure	INDUSTRIAL WASTES	RESEARCH
Timber/other vegetation	INSTITUTIONAL WASTES	SANITARY LANDFILL
ANALYSIS OF SOLID WASTE	LAWS/REGULATIONS	SEPARATION
Data	LITTER	SLUDGE
AUTOMOBILES	MANAGEMENT	STORAGE
BULKY WASTES	Municipal	STREET CLEANING
COLLECTION	Regional	TRAINING, EDUCATION,
COMPOST	Rural	PUBLIC RELATIONS
DISPOSAL	State	TRANSPORT
ECONOMICS	OCEAN DISPOSAL	SOURCE REDUCTION
Disposal costs	PACKAGING	ENERGY
Financing facilities	PROCESSING/REDUCTION	Demand, for solid waste
Pollution control costs	RECYCLING	management
Marketing information	Incinerator residue	Fuel from wastes
Taxes and incentives	Industrial wastes	Heat utilization from
HAZARDOUS WASTES	Mining wastes	incineration

For each input to the SWIRS computer file a sheet is prepared which contains a complete bibliographic citation and an informative abstract. Although foreign language articles are abstracted in English, the articles themselves are not always completely translated.

As of February 1977 there were approximately 42,000 documents and abstracts in the system.

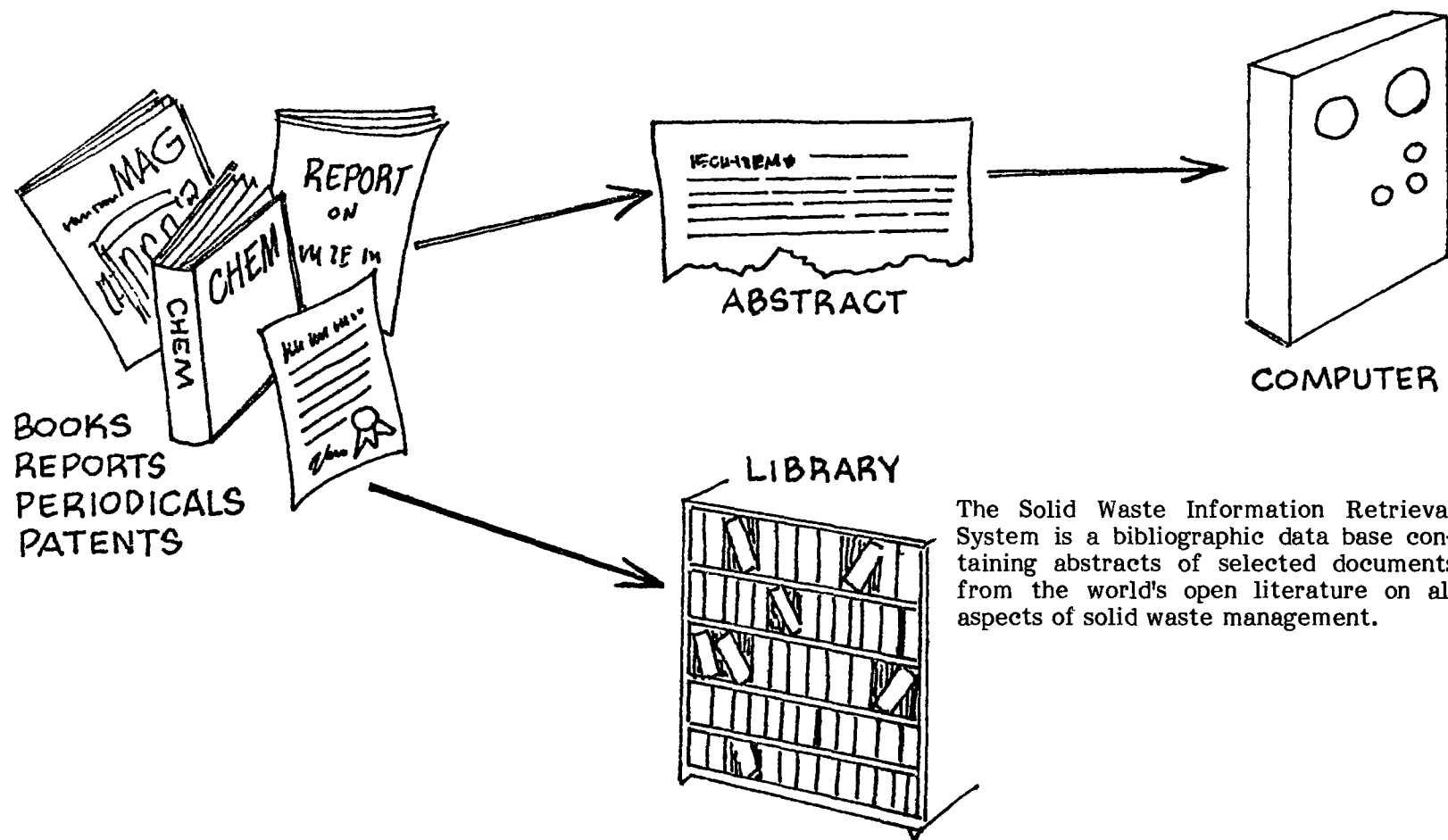


Figure 1.—Input

User Services

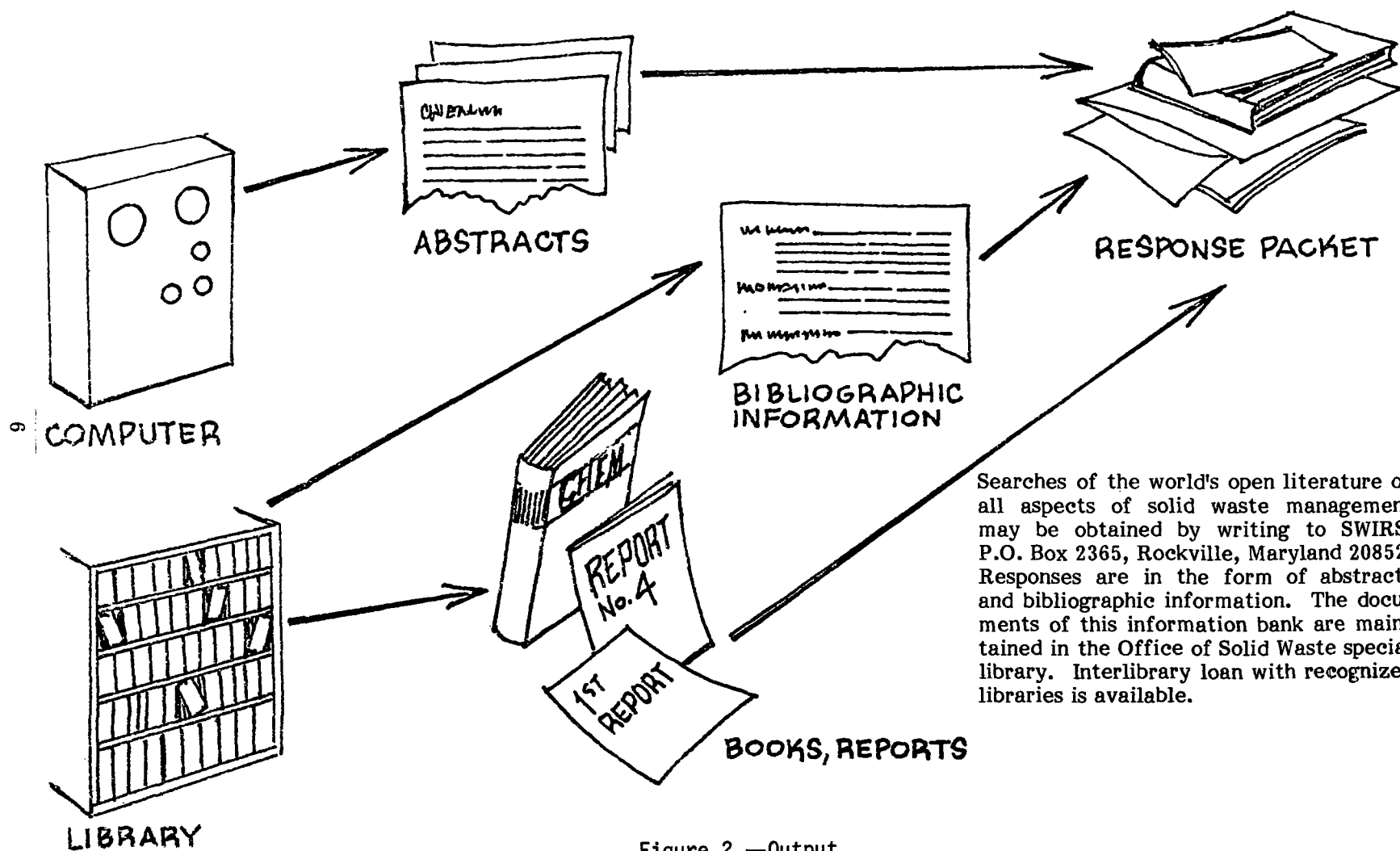
SWIRS offers a variety of services. These include responding to general inquiries, conducting literature searches on specific topics, library services, preparing of specialized bibliographies, publishing a monthly abstract bulletin, providing liaison to the World Health Organization and Environment Canada solid waste activities, and conducting user seminars. No fee is charged at present for any of these services. In addition, the Chief of the Information Retrieval Services Program provides consultation in information/library science design and, as a member of the EPA Information Systems Committee, assists in continued development of Agency information activities.

General Inquiries. Written, telephone, or in-person inquiries are honored for any general information that can be provided without a machine search, such as a request by a student for "publications that give a general picture of the solid waste problem in the United States." Referral services are also provided to direct an inquirer to persons working in EPA, other Federal agencies, or others who are knowledgeable in the subject of the request. General information may be requested by calling (202) 755-9153 or by writing or visiting SWIRS, 401 M Street, S.W., Washington, D.C. 20460.

Literature Searches. Comprehensive literature searches may be obtained by writing to SWIRS, P.O. Box 2365, Rockville, Maryland 20852. To avoid the probability of receiving an unnecessary volume of material unrelated to your needs, be specific when requesting a literature search.

The sources of information within Office of Solid Waste and other government and private sources are tapped in response to such requests (Figure 2). The primary source is the SWIRS information bank, containing the information abstracted from the scientific and technical documents. Capability exists for selective retrieval by a controlled set of keywords and other data elements, permitting entry of a question such as: "What technology exists in eastern Europe related to utilization of heat from incinerators since 1969?" Searches may also be conducted to provide complete bibliographic citation information when a reference is incomplete, or to verify the accuracy of a citation. The results of all searches are prescreened before they are sent to requestors in an effort to cull out items not closely related to the topic. (Copyright restrictions preclude provision of full text of pertinent articles; however, there are provisions for interlibrary loan of all documents in the system.)

A search of the library is made and citations of pertinent holdings not yet entered into the system, as well as related OSW-generated publications, are provided where appropriate. (All library services are described below.) Requests are normally answered within ten days of receipt of the written request. To insure that SWIRS is responsive to users' needs, feedback is sought through user evaluation of the effectiveness of the information received, including suggestions for adding documents the user may have identified that were not included in the



Searches of the world's open literature on all aspects of solid waste management may be obtained by writing to SWIRS, P.O. Box 2365, Rockville, Maryland 20852. Responses are in the form of abstracts and bibliographic information. The documents of this information bank are maintained in the Office of Solid Waste special library. Interlibrary loan with recognized libraries is available.

Figure 2.—Output

information package. Feedback is also obtained through periodic interviews with key users. Based on the feedback, the criteria used to select documents for input to SWIRS are updated, and terms are added or deleted from the thesaurus as well as the major categories listing.

User Seminars. Seminars are primarily designed for Office of Solid Waste personnel; however, other users may request an appointment for demonstration and instruction. The seminars provide users with a detailed knowledge of the SWIRS information bank and related facilities.

Publications. The information bank is also the source of various bibliographic publications. The following is a listing of the documents generated by the system over the past 10 years:

Solid Waste Management; Abstracts from the Literature, 1964, 1965, 1966, 1967, 1968

Abstracts; Selected Selected Patents on Refuse Handling Facilities for Buildings

Patent Abstracts; International Solid Waste Management (1945-1969)

Patent Abstracts; United States Solid Waste Management (1945-1969)

Solid Waste Management Monthly Abstract Bulletins, Volume 1, 1973

Users' Guide to the Solid Waste Information Retrieval System
Thesaurus (out of print)

Library Holdings--Nonperiodical; Federal Solid Waste Management Program

All these documents are available from:

Solid Waste Information
U.S. Environmental Protection Agency
Cincinnati, Ohio 45268

THE LIBRARY

In the process of gathering the SWIRS data base over the past nine years, we have developed a collection of solid waste management literature from various parts of the world and have organized this into the SWIRS Library. Since the SWIRS information bank is maintained via the contract mechanism, the library is also housed at the contractor facility; this is to insure adequate coverage of the materials available and more rapid response to user requests. Interlibrary loan is available through recognized libraries. All that is required to borrow any document

identified from an abstract from the system is the six-digit accession number, which appears in the upper right corner of the abstract. It SHOULD BE NOTED THAT THIS LIBRARY IS NOT A PART OF THE CENTRAL EPA library but is instead a unit of the Office of Solid Waste.

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SW-636

Region I
John F. Kennedy Bldg.
Boston, MA 02203
(617) 223-7210

Region II
26 Federal Plaza
New York, NY 10007
(212) 264-2515

Region III
6th & Walnut Sts.
Philadelphia, PA 19106
(215) 597-9814

Region IV
345 Courtland St., N.E.
Atlanta, GA 30308
(404) 881-4727

Region V
230 South Dearborn St.
Chicago, IL 60604
(312) 353-2000

Region VI
1201 Elm St., First International Bldg.
Dallas, TX 75270
(214) 749-1962

Region VII
1735 Baltimore Ave.
Kansas City, MO 64108
(816) 374-5493

Region VIII
1860 Lincoln St.
Denver, CO 80203
(303) 837-3895

Region IX
100 California St.
San Francisco, CA 94111
(415) 556-2320

Region X
1200 6th Ave.
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