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INDUSTRIAL WASTE EXCHANGES

fact sheet

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What is an industrial waste exchange?

Waste exchanges are based on the fact that one factory's waste can be another's feedstock. Most waste exchanges are information clearinghouses: they provide information about specific waste materials that are available, and companies interested in using the wastes as raw materials are put in contact with the waste generators. Other exchanges actually buy and sell the wastes; they have been called *material* exchanges. In essence, waste exchanges are a means of fostering resource recovery and conservation.

The first exchanges started in Europe in 1972, and the idea has spread quickly there and in this country. At least 14 information exchanges and 3 material exchanges have been established in the United States in the past few years (see list).

How do waste exchanges work?

The basic service provided by an information exchange or clearinghouse is simple and limited. Action begins when the waste generator sends to the clearinghouse his offer of waste material which he thinks may have value to someone else. (Similarly, a user may initiate action by sending in his request for needed waste material.) The clearinghouse then publishes the generator's offer, among others, in its next regular list. The offering firm is identified only by code number. A prospective user may then contact the clearinghouse to register his interest. When the clearinghouse passes the user's name on to the generator, it has completed its service.

From then on, generator and user negotiate directly to discover whether the many other requirements for a transfer, such as acceptable purity level, price, transportation costs, and mutual confidence, are or can be satisfied. If so, the generator will transfer the waste to the user directly.

Thus the clearinghouse performs only limited functions to help generators advertise the existence of waste with possible resale value,

help users identify such waste, and refer potential partners to each other. All other requirements for a transfer must be satisfied by others—sometimes by generators and users themselves, and sometimes by dealers or waste reprocessors. Some active information exchanges vary this basic pattern slightly to meet their needs and special conditions.

The services of material exchanges are more complex and expensive. They buy or accept wastes, analyze their properties, identify potential uses, reprocess them as needed, and sell at a profit. They transfer information only as a courtesy to clients or in the course of paid consulting services. Whereas an information clearinghouse needs only a part-time staff and office space, a material exchange needs highly competent technical, managerial, and marketing skills, as well as storage and processing facilities.

Why is there growing interest in such systems today?

The costs of materials and of waste management are rising, and industries are increasingly interested in reducing waste and making use of waste materials where that is feasible.

One of the factors causing waste management costs to rise is the need to meet Federal and State standards that are intended to protect health and environmental quality. Major new regulations and standards affecting industrial waste disposal are currently being developed by the U.S. Environmental Protection Agency under the Resource Conservation and Recovery Act of 1976 (RCRA). Under the authorities of Subtitle C of RCRA, hazardous waste, which represents 10 to 15 percent of all industrial waste, will be regulated from the point of generation through disposal. EPA or State agencies authorized by EPA will administer the regulatory program in every State. The disposal on land of all other industrial waste will be subject to standards that States are expected to apply under RCRA (Subtitle D). These requirements will generally mean added waste management costs and, consequently, added incentive for reducing and recycling wastes.

Who operates the exchanges?

Materials exchanges are being operated by profit-oriented private concerns. An information exchange can be either a private or governmental effort; typically, it is a nonprofit operation. Practice has shown that governmental operation by a regulatory office inhibits the free flow of information necessary for a viable waste exchange. Private operations (chambers of commerce, trade associations, environmental interest groups, etc.) have had the greatest degree of success.

What kinds of waste are being transferred?

Opportunities exist in many industries. Thus far, typical wastes that are offered and sought through the exchanges include: concentrated acids, alkalis, solvents, catalysts, oils, other combustibles (for fuel), and wastes with high concentrations of recoverable metals.

How successful have waste exchanges been?

They have had varying degrees of success. Material exchanges depend on aggressive marketing. Information exchanges have followed a developmental pattern: a growing period, plateau, and stabilized listing periods. European exchanges have consummated trades amounting to as much as 30 percent of their listings. The average in the United States is about 10 percent.

The initial period seems to present the greatest problems, which lie mostly in establishing lines of communication with industries and effectively educating them to the existence of the exchange and the potential benefits of the program. The importance of waste exchanges may not be fully realized until the Federal and State programs developed under the Resource Conservation and Recovery Act have taken effect.

Where are the existing waste exchanges?

EPA's current list includes the following:

Information exchanges

California

California Waste Exchange
California State Health Department
Vector and Waste Management
2151 Berkeley Way
Berkeley, Calif. 94704
(415) 843-7900 ex. 434

Illinois

Environmental Clearinghouse Organization
Illinois Liquid Waste Haulers Association
3426 Maple Lane
Hazelcrest, Ill. 60424
(312) 335-0754

Iowa

Iowa Industrial Waste Information Exchange
CIRAS, Building E
Iowa State University
Ames, Iowa 50010
(515) 294-3420

Georgia

Georgia Waste Exchange
Georgia Business and Industry Association
181 Washington Street, S.W.
Atlanta, Ga. 30303
(404) 659-4444

Minnesota

Minnesota Waste Exchange
Minnesota Association of Commerce and Industry
200 Hanover
480 Cedar Street
St. Paul, Minn. 55101
(612) 227-9591

Missouri

St. Louis Industrial Waste Exchange
St. Louis Regional Commerce and Growth Association
10 Broadway
St. Louis, Mo. 63102
(314) 231-5555

New Jersey

New Jersey State Waste Exchange
New Jersey Chamber of Commerce
5 Commerce Street
Newark, N.J. 07102
(201) 623-7070

New York

Industrial Material Bulletin
EnKarn Corporation
P.O. Box 590
Albany, N.Y. 12201
(518) 436-9684

Syracuse Waste Exchange
Allied Chemical
P.O. Box 6
Solvay, N. Y. 13209
(315) 487-4198

Ohio

Industrial Waste Information Exchange
Columbus Industrial Association
1515 West Lane Avenue
Columbus, Ohio 43221
(614) 486-6741

Oregon

Portland Recycling Team
1801 N.W. Irving
Portland, Oreg. 97209
(503) 228-5375

Tennessee

Tennessee Waste Swap
Tennessee Department of Public Health
Division of Solid Waste Management
230 Capitol Hill Building
Nashville, Tenn. 37219
(615) 741-3424

Texas

Houston Waste Exchange
Houston Chamber of Commerce
1100 Milam Building – 25th Floor
Houston, Tex. 77002
(713) 651-1313

Washington

Western Environmental Trade Association
Park Place Suite 314
1200 6th Avenue
Kent, Wash. 98101
(206) 623-5235

Material exchanges

California

Zero Waste Systems
2928 Poplar Street
Oakland, Calif. 94608
(415) 893-8257

Massachusetts

National Resources Recycling Exchange
286 Congress Street
Boston, Mass. 02210
(617) 482-2727

New York

Union Carbide
Surplus Products Group
Investment Recovery Department
270 Park Avenue
New York, N.Y. 10017
(212) 551-2345