



State Resource Conservation and Recovery Activities, 1978

STATE RESOURCE CONSERVATION AND RECOVERY ACTIVITIES, 1978

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RESOURCE RECOVERY ACTIVITIES

IN THE STATES, 1978

INTRODUCTION

As open dumps are being closed and upgraded, and as land disposal sites become increasingly difficult to locate and more stringently regulated, resource conservation and recovery emerges as a key alternative for solid waste management in the United States.

Several sections of the Resource Conservation and Recovery Act of 1976 (RCRA), Public Law 94-580, stress the importance of developing State resource conservation and recovery programs. The crucial mechanism for planning and implementing these programs will be the State Solid Waste Management Plans. On August 28, 1978, the U.S. Environmental Protection Agency issued proposed Guidelines for the development and implementation of these plans; the final guidelines were published July 31, 1979. Subpart D of these guidelines delineates the required and recommended resource conservation and recovery activities which are to be incorporated in the State plans.

In addition to the Guidelines, EPA's Resource Recovery Division has drafted a handbook entitled Developing a State Conservation and Recovery Program. The handbook describes opportunities which are available to the States, and gives examples of States which have utilized such opportunities in the past.

The activities listed on the following pages present a picture of the current level of State resource conservation and recovery activities in the United States. The data was collected over a 12 month period, January to December 1978. Each State's activities have been broken down into three categories: planning, legislation, and implementation.

Most States have already been contacted to update the data in this booklet for the 1979 report. Any further information or any questions regarding these State activities would be welcomed by EPA. Please contact David Gavrich, WH-563, Office of Solid Waste, U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, D.C., 20460. Telephone number 202-755-9140.

REGION 1

CONNECTICUT - Department of Environmental Protection and Connecticut
Resource Recovery Authority

Planning:

- o Connecticut Resource Recovery Authority sent out a "request for approaches" for resource recovery effort in Greater Hartford/Greater New Haven area. State now has a list of qualified firms which will be invited to bid on this second State-sponsored resource recovery project. (Bridgeport facility is currently under construction.) Contractor for new project should begin by December 1978.

Legislation:

- o Connecticut Resource Recovery Authority established and given bonding authority.

Implementation:

- o Construction on Connecticut Resource Recovery Authority's first refuse-derived fuel (RDF) facility, the Greater Bridgeport Project, is 80 percent complete. The plant will handle 1800 tons per day (tpd) and will supply fuel to the United Illuminating Company.

MAINE - Department of Environmental Protection

Planning:

- o a consultant is currently under contract to update the State Solid Waste plan and analyze the State's resource recovery role in accordance with RCRA and the soon-to-be-issued guidelines.

Legislation:

- o bottle and can deposit law passed in November 1976 and effective January 1, 1978.

Implementation:

- o no significant activity.

MASSACHUSETTS - Department of Environmental Management and Bureau of
Solid Waste Disposal

Planning:

- o State Bureau of Solid Waste Disposal directs regional resource recovery facility projects in the State's four largest metropolitan areas; one 3000 tons per day project close to construction, one well into planning phase, and two in early stages of planning.

REGION 1 - Massachusetts (cont'd)

Legislation:

- o Bureau of Solid Waste Disposal actively supporting renewed effort for Bottle Bill legislation.

Implementation:

- o no significant activity.

NEW HAMPSHIRE - Department of Health and Welfare

Planning:

- o no significant activity.

Legislation:

- o no significant activity.

Implementation:

- o State demonstration projects on sludge composting, rural recycling, and regional planning for resource recovery. Knottingham method of rural recycling was developed.
- o State DOE sponsored City of Concord in implementation of model waste oil recycling program for the State.

RHODE ISLAND - Department of Environmental Management and Rhode Island Solid Waste Management Corporation

Planning:

- o Rhode Island Solid Waste Management Corporation issued RFP for resource recovery facility in Greater Providence area (October 1977). State is currently receiving proposals (due March 1978).

Legislation:

- o Rhode Island Solid Waste Management Corporation established and given bonding authority.

Implementation:

- o Rhode Island Solid Waste Management Corporation is providing technical assistance on recycling to inquiring communities.

VERMONT - Agency of Environmental Conservation

Planning:

- o no significant activity.

REGION 1 - Vermont (cont'd)

Legislation:

- o Bottle Bill enacted in September 1973.
- o all non-refillable glass banned in January 1977.

Implementation:

- o State initiated waste oil recycling program in Chittenden County. Program functions through specified service stations and State-assigned collection vendors. Program is now financially self-sustaining.

REGION 2

NEW JERSEY - Department of Environmental Protection and Department of Energy

Planning:

- o technical assistance being given by New Jersey Department of Energy to refuse-to-energy project in Newark.
- o some assistance being provided to counties in meeting New Jersey solid waste law of 1975.
- o Governors of New Jersey and New York endorsed Port Authority Resource Recovery Industrial Park Proposal; May 3, 1978.

Legislation:

- o Solid Waste Management Act (P.L. 1975, c.326); all solid waste management and planning by counties; coordinated by Department of Environmental Protection; maximum "feasible" resource recovery; first county plans due July, 1978.

Implementation:

- o no significant activity.

NEW YORK - Department of Environmental Conservation (DEC)

Planning:

- o State provides assistance (technical and financial) for planning of resource recovery facilities provided to Counties of: Suffolk, Westchester (2 projects), Dutchess, Cattaraugus, Onondaga (second phase), and Chemung (second phase). Also provides assistance for planned projects in Cities of Hempstead and Glen Cove (first codisposal project in State).

REGION 2 - New York (Cont'd)

Planning (cont'd):

- o detailed market studies conducted in New York City and Ithaca-Auburn-Cortland area.
- o general market surveys conducted in Counties of: Chautauqua, Erie and Niagara, Monroe, Oneida, Westchester; Capitol District; and Long Island.
- o State Comprehensive Resource Recovery and Solid Waste Management Plan, draft; February 1978.
- o State funded New York City's Comprehensive Solid Waste Management Plan for Refuse Disposal and Recovery of Material and Energy Resources, June 1977; document proposes financing 11 resource recovery projects in New York City over the next seven years.
- o \$1 million now available from State for matching grants to rural and urban areas purchasing source separation equipment.
- o Government of New York and New Jersey endorsed Port Authority Resource Recovery Industrial Park proposal, May 3, 1978.

Legislation:

- o Resource Recovery Policy Act, 1977; assures development of State comprehensive resource recovery plan, legislative review and recommendations, and establishes State policy encouraging resource recovery.
- o DEC has suggested waste oil legislation in the State Plan.
- o office separation and procurement of recycled materials legislation drafted by Assemblyman Hochbruckner; will be introduced this session.
- o Environmental Quality Bond Act, 1972; provides ultimately for \$175M in funding for construction of resource recovery projects.

Implementation:

- o State technical and financial assistance helped to complete first phase of resource recovery projects in Onondaga and Chemung Counties, and City of North Hempstead.
- o State technical and financial assistance currently implementing construction of refuse-derived fuel (RDF) facilities in Albany and Monroe Counties.
- o Oyster Bay and Smithtown high density boilers recently completed; partially funded by State.

REGION 2 - (cont'd)

PUERTO RICO - Environmental Quality Board

Planning:

- o Governor has established Resource Recovery Task Force and has applied for increased Federal assistance to support planning and preparation of bidding documents for resource recovery procurement.
- o Source Separation Task Force established to develop education programs.

Legislation:

- o Act to establish Solid Waste Management Authority passed by Senate of Puerto Rico in mid-May; act now pending House.

Implementation:

- o no significant activity.

VIRGIN ISLANDS - Department of Public Works

Planning:

- o Request for Qualifications (RFQ) out for procurement of a feasibility study for energy recovery in St. Thomas; deadline for responses - June 22, 1978.

Legislation:

- o no significant activity.

Implementation

- o no significant activity.

REGION 3

DELAWARE - Delaware Solid Waste Authority

Planning:

- o market studies conducted in the Wilmington area.
- o planning (with EPA's assistance and grant money) of large State-owned codisposal facility in Wilmington.

REGION 3 - Delaware (cont'd)

Legislation:

- o establishment of Delaware Solid Waste Authority, 1974; responsible for statewide disposal of all solid waste in landfills and resource recovery facilities.

Implementation:

- o State-owned Wilmington codisposal project now in design stage; facility will handle 50 percent of State's solid waste.

DISTRICT OF COLUMBIA - Department of Environmental Services

Planning:

- o preliminary discussions with Potomac Electric Power Company for use of refuse-derived fuel in utility boilers.
- o participating in the National Center for Resource Recovery pilot project at incinerator #5.

Legislation:

- o participates in talks with suburban communities on beverage container legislation in metropolitan area; D.C. Council passed mandatory deposit contingent on suburban community legislation.

Implementation:

- o no significant activity.

MARYLAND - Maryland Environmental Service

Planning:

- o planning and feasibility studies conducted for proposed project at Salisbury.
- o State assistance preparing county plans.

Legislation:

- o Bill #153, requires 5 percent of State paper purchases by Department of General Services in 1978 to be recycled material; 25 percent by 1981; 45 percent by 1985. Enacted in 1977.

Implementation:

- o State is part owner (with Baltimore County) of refuse-derived fuel demonstration project in Texas, Maryland.

REGION 3 - Maryland (Implementation cont'd)

- o State funded and participated (with EPA and Monsanto Enviro-Chem Systems, Inc.) in Baltimore City demonstration pyrolysis plant.
- o State office paper separation and recycling program.

PENNSYLVANIA - Department of Environmental Resources

Planning:

- o Five metropolitan area market studies conducted.
- o feasibility study/implementatoin grants made available to locals.
- o assistance to County plan preparation.

Legislation:

- o State-sponsored national Center for Resource Recovery seminars in six regions of the State.

Implementation:

- o no significant activity.

VIRGINIA - Department of Health

Planning:

- o half-million dollar state program for all solid waste activities begun; FY 79 solid waste budget double that of FY 78.

Legislation:

- o no significant activity.

Implementation:

- o no significant activity.

WEST VIRGINIA - State Solid Waste Authority

Planning:

- o no significant activity.

REGION 3 West Virginia (Cont'd)

Legislation:

- o establishment of the State Solid Waste Authority, 1977; to control disposal of all solid waste in State; not yet operational.

Implementation:

- o no significant activity.

REGION 4

ALABAMA - State Department of Public Health

Planning:

- o no significant activity; resource recovery planning will probably be designated as a regional or local function.

Legislation:

- o beverage container legislation and two litter bills introduced.

Implementation:

- o no significant activity.

FLORIDA - Department of Environmental Regulation and Resource Recovery Council

Planning:

- o commitment of cooperation obtained from largest private utility in the State.*
- o reviewed resource recovery legislation in other States.*
- o investigated financing methods and proposed amendments to State revenue bond financing law; passed during the 1975 session.*
- o case study of Dade County Resource Recovery Project written for use by other counties.*
- o supported four-county feasibility study in Tampa area.*
- o conducted 21-county survey of solid waste legal authority.*
- o conducted Statewide energy recovery feasibility study.

* Resource Recovery Council.

REGION 4 - Florida (cont'd)

Legislation:

- o Resource Recovery and Management Act of 1974; set up Resource Recovery Council and gave authority to designate 19 counties to develop resource recovery plans.
- o HB-557; Resource Recovery Act of 1978; would authorize appropriations for the 19 designated counties, and also create a sales tax exemption for equipment and facilities directly involved in recycling and energy recovery from solid waste; bill has passed out of committee.
- o HB-291; would require the Department of General Services to recycle all solid wastes generated by State offices.

Implementation:

- o produced several publications to provide information and technical guidance on resource recovery.*
- o the Resource Recovery Council monitors all resource recovery activities within State and prints column "Around the State" in Council Newsletter.

GEORGIA - Department of Natural Resources (DNR); Environmental Protection Division (EPD)

Planning:

- o State assists regional resource recovery feasibility studies in Coastal Plains 10-county area and Middle Georgia (Macon-Dibbs) area.
- o EPD supports effort to study recycling of waste oil from State vehicles.

Legislation:

- o Act 1364, April 1978; allows counties and municipalities to establish Resource Recovery Authorities with bonding and long-term contracting power.

Implementation:

- o State let out new contract for sale of paper from State Office Separation Program.
- o DNR will purchase solely recycled paper in future; may be expanded to all State agencies.

* Resource Recovery Council.

REGION 4 - GEORGIA (Implementation cont'd)

- o State funded source separation project for corrugated in City of Tifton.
- o State funded purchase of chippers for two communities.
- o State assisted Warner Robins (Houston County) with newspaper recycling program.

KENTUCKY - Department of Natural Resources and Environmental Protection

Planning:

- o no significant activity.

Legislation:

- o Litter bill, modeled after Washington State's law, has passed House and is projected to pass Senate.
- o Beverage container legislation has been introduced and squashed in three consecutive sessions.
- o Bill was introduced to enable State to cooperate in funding and planning for resource recovery demonstration projects.

Implementation:

- o no significant activity.

MISSISSIPPI - State Board of Health

Planning:

- o no significant activity.

Legislation:

- o HB-446; designed to authorize bonding for resource recovery facilities.

Implementation:

- o a resource recovery plant is currently under construction on Gulf Coast; no State role.
- o rubber, steel, and oil recovery plants are in full production, as is a plant which converts chicken wastes and offal into feed for chickens; no State role.

NORTH CAROLINA - Department of Human Resources; Division of Health Services

Planning:

- o no significant activity.

Legislation:

- o 1975 Amendments to State Solid Waste Law; authorizes certification of resource recovery and recycling facilities and equipment; entitles applicant to special tax treatment.

Implementation:

- o approximately 40 certificates issued in 1976; 100 during 1977.

SOUTH CAROLINA - Department of Health and Environmental Control (DHEC)

Planning:

- o DHEC responsible for administration of the resource recovery grant from Appalachian Regional Commission.

Legislation:

- o beverage container and litter control bills pending. Beverage container given 50/50 chance of passage.

Implementation:

- o State offers technical assistance when requested.

TENNESSEE - Department of Public Health

Planning:

- o State provides some technical assistance when requested for resource recovery feasibility studies.
- o State is looking into State paper recovery program.

Legislation:

- o Resource Recovery Loan Law, passed in 1974.

Implementation:

- o no significant activity.

REGION 5

ILLINOIS - Illinois Environmental Protection Agency

Planning:

- o \$4.2M State grant to the City of Springfield for the purpose of building a demonstration refuse-derived fuel (RDF) plant. A feasibility study was done, but the city decided not to build the plant. Money returned to State.

Legislation:

- o no significant activity.

Implementation:

- o the City of Chicago has two resource recovery facilities: (1) a waterwall incinerator that generates steam for sale to one industry, and (2) an RDF plant that produces fuel to be used by Commonwealth Edison. No State role.
- o many communities around Illinois have recycling centers, and the City of Rockford, Illinois has a long-running newspaper source separation program. No State-role.

INDIANA - Indiana State Board of Health

Planning:

- o assists in the establishment of a Statewide communications network for source separation facilities to provide the facilities more control over marketing of recovered materials.
- o conducted a market survey in 1975, via phone calls and questionnaires.

Legislation:

- o Solid Waste Study Commission, a special committee of Legislature, will introduce an amendment to the Refuse Disposal Act identifying ownership of local waste stream.

Implementation:

- o active program of lectures and press to college, civic groups, etc., on the status of solid waste legislation in Indiana.
- o Environmental Quality Commission has all plans for a waste exchange approved. The waste exchange should begin operation soon.
- o Agency is developing a paper recycling program for the State Board of Health building.

REGION 5 - Indiana (Implementation cont'd)

- o will publish (December 1978) a guide to setting up recycling and source separation programs.

MICHIGAN - Michigan Department of Natural Resources

Planning:

- o as part of the State plan, Michigan is near completion of a general study of the feasibility of resource recovery in the State.
- o a market survey has been done via letters sent to possible markets in the State. A response of approximately 30 percent was received.
- o provided technical assistance to various groups interested in resource recovery (in Detroit, Lansing, Ann Arbor, Port Huron Township, Genesee Township, and Oakland County).
- o provided technical assistance to Kalamazoo in conjunction with State Department of Energy grant to study paper recovery.

Legislation:

- o expects activity on the Michigan State plan to be completed.
- o The Bottle Bill (CL-445.571-76) passed by a 2-1-1 margin in 1976; effective December 1978.
- o bill proposes uses for escheats money (money paid as bottle deposits but never retrieved). Those uses include resource recovery, conservation, Youth Conservation Corps (YCC), endangered species, etc.
- o The Resource Recovery Act (SB 336) of 1974. The goals of the law to conserve natural resources, finance and regulate facilities, and establish a commission to deal with resource recovery and solid waste.
- o an amendment to the Michigan Solid Waste Disposal Act (SWDA) was passed; allows cities to issue bonds and/or levy taxes to support resource recovery. It also allows cities long-term contracting. Amendment addresses many RCRA requirements.

Implementation:

- o Detroit has selected firms to build a 3000 ton per day resource recovery facility, and has negotiated the sale of steam expected to be derived from the facility. State gave technical assistance and will be responsible for licensing the facility when built. Developing a financing mechanism is the next hurdle.

MINNESOTA - Minnesota Pollution Control Agency

Planning:

- o several resource recovery facilities are developing in Minnesota: the city of Duluth has under construction (due to be on line in 1979) a codisposal facility that will burn refuse-derived fuel and sludge, to generate steam; St. John's University in Collegeville recently completed a feasibility study for a 50 TPD modular incinerator; Twin Resco is funding and Minnesota Pollution Control Agency is preparing an Environmental Impact Statement (EIS) for a 1200 ton per day mass burning plant in St. Paul; St. Cloud*, Rochester*, Red Wing, Moorehead*, and Fairmont* all have completed feasibility studies for resource recovery facilities. State gave 50 percent match for the feasibility studies designated by an (*).
- o State has drafted a market survey.
- o the State's grant program ended July, 1977 after having given \$1.2M in grants for feasibility studies, recycling centers, public education, and regional planning.

Legislation:

- o pop-top cans are banned by State law.
- o State packaging regulations, SR I-VI, allow the banning of certain types of packaging if the packaging is determined to be environmentally unacceptable. The law is currently being brought to State Supreme Court.

Implementation:

- o the Minnesota Association of Commerce and Industry is operating an industrial waste exchange.
- o abandoned motor vehicle program has been operating for six years. The program reimburses counties and locals for the collection and disposal of motor vehicles.
- o Waste Oil Bill, Chapter 168, which passed in January, 1977, requires oil retailers to post signs indicating where used oil can be returned.

OHIO - Ohio Environmental Protection Agency

Planning:

- o State-funded Cuyahoga County resource recovery project Request for proposal (RFP) will be issued by December, 1978. The consultant for the project has already conducted a detailed market survey.

REGION 5 - Ohio (Planning cont'd)

- o Agency is continuing work on Ohio's State plan. Already completed: Phase I -- which includes a Statewide feasibility study for resource recovery.
- o technical assistance and indirect funding (through other agencies) to resource recovery projects in Montgomery County, Cincinnati, Toledo and Akron.
- o resource recovery slide show concerning technology and State planning being shown to college and government groups.

Legislation:

- o several variations of beverage container legislation may be reintroduced in January, 1979.
- o a litter control act similar to those in California and Washington has been introduced; currently dormant in Committee.
- o an amendment to ORC 343 "Garbage and Refuse Disposal Districts" (dealing with solid waste) has created specific districts for solid waste management planning.
- o ORC 303 (amendment to 343), which was enacted in 1977, allows contracts without competitive bidding for resource recovery projects.
- o a bill, S-266, has been introduced to give Ohio EPA implementing authority for RCRA.

Implementation:

- o Akron resource recovery facility is under construction. Some state funds.
- o small waste exchange operating in Columbus, Ohio. No State role.
- o waste oil program in Cincinnati. No State role.

WISCONSIN - Wisconsin Department of Natural Resources (WDNR) and Wisconsin Solid Waste Recycling Authority (WSWRA)

Planning:

- o contractor has been selected for a refuse-derived fuel (RDF) plant serving a three-county area, the WSWRA's Region 1. The Authority will contribute nearly \$10M to the project's construction.
- o the city of Madison is constructing a 50,000 ton per year (160 tons per day) RDF plant.

REGION 5 - Wisconsin (Planning cont'd)

- o Brown County is conducting a feasibility study for resource recovery in the Green Bay area; State giving technical assistance.
- o the Governor's Recycling Task Force completed a market survey in 1973 as part of a study which initiated the formation of the WSWRA; funded by the State legislature.
- o the Milwaukee Metropolitan Sewage District is setting up a composting program using Beltsville technology.

Legislation:

- o 1974 creation of WSWRA to develop, finance and implement resource recovery projects throughout the State.
- o authority to regulate solid waste management in Wisconsin includes evaluating and regulating recycling plants under Chapter 144.43, State Statutes.
- o a legislative subcommittee in the State government is designated specifically to work on environmental problems.

Implementation:

- o going through the operational shakedown phase of Americology's 1200 ton per day refuse-derived fuel (RDF) plant in Milwaukee. WDNR reviewed and suggested changes in plant's dust collection. The plant was constructed in 1975 to recover ferrous metal, aluminum and glass along with producing RDF.
- o Dane County (Madison) has waste oil recycling program.
- o office paper recycling programs are active at the Wisconsin Department of Natural Resources, the University of Wisconsin at Madison, and several businesses in the State. State helped organize and contract.
- o Madison has a newspaper source separation program that regularly collects about 40 percent of the newspaper in its area. No direct State role.

REGION 6

ARKANSAS - Department of Energy and Environmental Policy; Department of Pollution Control and Ecology

Planning:

- o Energy Office assists local governments in determining feasibility of energy recovery from solid waste.

REGION 6 - Arkansas (Planning cont'd)

- o Solid Waste Section of Department of Pollution Control and Ecology recently opened Resource Recovery Planning Section to coordinate with Department of Energy.

Legislation:

- o Litter Bill passed in 1977.
- o Bottle Bill has been introduced but passage is considered unlikely for several years.

Implementation:

- o several jurisdictions have small-scale energy recovery systems in operation: North Little Rock, Arkadelphia, Osceola, West Memphis, Helena.
- o several other areas and institutions are studying energy recovery feasibility.

NEW MEXICO - Environmental Improvement Agency

Planning:

- o Beverage Industry Recovery Projects (BIRP) - six sites in New Mexico.
- o waste oil recycling effort (Environmental Improvement Agency and State Energy Resource Board).
- o sludge farming.
- o tire recycling.

Legislation:

- o Litter Control Bill may be introduced in 1979 legislative session.

Implementation:

- o source separation programs (paper, aluminum, glass, steel) active in Albuquerque, Santa Fe, Las Vegas.
- o Taos and other areas experimenting with paper recycling.

REGION 6 (Cont'd)

LOUISIANA - Office of Science, Technology, and Environmental Planning

Planning:

- o Hooker Chemical Company in preliminary planning for 3600 ton per day energy and material recovery plant in Taft, Louisiana. Currently negotiating with surrounding parishes for waste stream supply.

Legislation:

- o number of bills have been discussed, but little progress has been made. State is currently involved in a controversial reorganization of its entire environmental program.

Implementation:

- o Resource Recovery I in New Orleans--a 600 ton per day experimental facility for mechanical separation technologies.
- o Kaiser Aluminum currently operating waste aluminum recovery project.

OKLAHOMA - Oklahoma Department of Health

Planning:

- o City of Tulsa planning refuse-derived fuel plant to process entire metropolitan area waste supply.
- o Agency is conducting market survey for secondary materials processors.
- o several paper separation programs.

Legislation:

- o two bottle bills in 1977; no action.
- o Agency is looking into long-term contracting issues.

Implementation:

- o successful source separation program (glass, paper, metals) at Fort Sill Military Base.

REGION 6 - (cont'd)

TEXAS - Texas Department of Health

Planning:

- o Agency is studying resource recovery technologies, markets and other factors to determine most effective method of implementing large-scale resource recovery projects in Texas.
- o formulates policy for resource recovery in the State.
- o Pollution control Subcommittee is studying resource recovery in public and private sectors; coordinated with Texas Department of Health.
- o inventories currently being taken of waste streams and potential markets in Harris County (Houston), Dallas County, Bexar County (San Antonio), Tarrant County (Fort Worth), and El Paso.

Legislation:

- o law requires State agencies to recycle office paper.
- o Non-returnable Bottle Subcommittee of the Liquor Regulation Standing Committee investigating returnable/non-returnable issue.

Implementation:

- o Midland/Odessa--paper shredding for land spreading as a soil conservation measure.
- o Browning-Ferris Industries currently testing mechanical separation and refuse-derived fuel facility using 25 percent of Houston's municipal solid waste.
- o City of Austin has small task force studying feasibility of refuse-derived fuel or gas pyrolysis project.
- o Texas Municipal League compiling data on resource recovery for large cities.
- o Houston Waste Exchange started January 1977; very successful; intended to service Gulf Coast, but has business over much of the U.S. and some foreign countries.
- o Dallas -- newspaper salvage program.
- o Fort Worth -- paper recovery.
- o Garland -- newspaper and aluminum recovery.
- o Richardson -- six-year-old source separation program, has two percent participation and earns modest revenue.

REGION 7

IOWA - Department of Environmental Quality

Planning:

- o observes resource recovery facility in Ames.
- o monitors planning efforts in other parts of State (Dubuque, Fort Madison, Des Moines).
- o researches wastes for potential recovery; reports are issued.

Legislation:

- o Bottle bill has been introduced; the State agency supports it (passed Senate, February 1978).

Implementation:

- o State-sponsored waste oil recycling program in Des Moines; not working as well as expected.
- o encouraged and assisted Iowa State University to establish industrial waste exchange.
- o encouraged and aided Project Pride to collect and recycle auto hulks Statewide.

KANSAS - Department of Health and Environment

Planning:

- o participates in and encourages resource recovery planning efforts in Lawrence (University of Kansas), Wichita, Kansas City, and Manhattan (Kansas State University).
- o completed and maintains Statewide market survey of secondary materials purchasers.

Legislation:

- o helped draft legislation defining ownership of solid waste (passed in 1977).
- o helped draft Bottle Bill; presently before Legislative Committee; outlook better than past efforts.
- o Litter Bill in committee; State agency takes no stand.

REGION 7 - Kansas (cont'd)

Implementation:

- o encouraged and supported waste oil program in Topeka; not working as well as expected.
- o monitors and encourages Department of Administration purchase of recycled materials for all State agencies.

MISSOURI - Department of Natural Resources

Planning:

- o participates in and encourages resource recovery planning in St. Louis, Kansas City, Fort Leonard Wood, Columbia (University of Missouri), Springfield, and Little Blue River Sewage District.
- o conducted resource recovery feasibility study for rural South Central Missouri (Ozarks) where landfill location is extremely difficult.
- o works with Missouri Environmental Improvement Authority to review bond financing applications for resource recovery projects.
- o completed and maintains market survey of secondary materials purchasers.
- o participated in State Energy conservation Plan which recommends attraction of new secondary materials industries to Missouri, plus more resource recovery.
- o encourages organized collection services and recycling activities on local level.

Legislation:

- o drafted Hazardous Waste Act with resource recovery as preferred disposal method.
- o supports Bottle Bill legislation; inserted Bottle Bill into Energy Conservation Plan and received Governor's approval; Bottle Bill would not have had chance alone.

Implementation:

- o sponsored Missouri Department of Natural Resources paper recycling program; assists Department of Administration to implement it.
- o assists Department of Administration in implementing recycled paper purchasing for all State agencies.

REGION 7 - Missouri (Implementation cont'd)

- o supports State Sheltered Workshop (for the handicapped) in materials recycling programs.
- o encouraged St. Louis Regional Commerce and Growth Association to establish industrial waste exchange, and provided assistance.

NEBRASKA - Department of Environmental Control

Planning:

- o assists resource recovery planning efforts in Lincoln and Omaha.
- o currently completing a market survey of secondary materials purchasers.

Legislation:

- o helped draft Litter Law; would provide funds for all solid waste management activities; presently in committee; outlook for passage is fair.

Implementation:

- o sludge compositing projects for sawdust; paunch.
- o encouraged waste oil program in Lincoln.
- o supports (with funds and technical assistance) the Keep Omaha Beautiful Recycling Program.

REGION 8

COLORADO - State Department of Health

Planning:

- o Denver waste exchange currently being planned.
- o Legislation needed to comply with RCRA requirements under study.

Legislation:

- o none specifically relating to resource recovery.
- o Bottle Bill defeated in legislature, chances for revival are slim.

REGION 8 - Colorado (cont'd)

Implementation:

- o feasibility of feedlot manure/methane conversion system being studied in Lamar.
- o Successful Mountain Bell telephone book recycling program in Denver.
- o Sawmill waste-energy conversion project being planned in Eagle County.
- o Department of Defense installations in Denver and Colorado Springs beginning paper recycling program.
- o City of Breckinridge and U.S. Forest Service studying feasibility of incinerator heat recovery system.

MONTANA - Department of Health and Environmental Services

Planning:

- o State funds local solid waste planning studies, which are required to consider resource recovery alternatives.

Legislation:

- o no legislation specifically relating to resource recovery.
- o Bottle Bill legislation handily defeated in last five legislative sessions.

Implementation:

- o successful Statewide abandoned auto program, funded by titling-registration fee.
- o Great Falls operating refuse shredder with ferrous recovery.
- o curbside newspaper collection in Helena, selling to local insulation manufacturer.

NORTH DAKOTA - State Department of Health

Planning:

- o joint tire recycling program with State of Montana and a private Canadian firm under study.
- o Department of Health provides limited resource recovery technical assistance when requested.

REGION 8 - North Dakota (cont'd)

Legislation:

- o none specifically relating to resource recovery.

Implementation:

- o successful statewide abandoned auto program.

SOUTH DAKOTA - Department of Environmental Protection (DEP)

Planning:

- o DEP provides limited technical assistance and information when requested.

Legislation:

- o Bottle Bill has been passed, but consumer Affairs agency has not yet implemented program.

Implementation:

- o City of Sioux Falls evaluating 450 ton per day refuse-derived fuel plant, funding has been secured.
- o Brown County operating refuse shredder, ferrous separation system.

UTAH - Utah Division of Health

Planning:

- o State provides limited technical assistance to localities when requested.

Legislation:

- o none specifically relating to resource recovery.

Implementation:

- o Weber County and City of Ogden planning energy recovery project using city-owned incinerators.
- o Salt Lake City operating successful newspaper recycling program.

REGION 8

WYOMING - Wyoming Department of Environmental Quality

Planning:

- o State has had no involvement with resource recovery.

Legislation:

- o no significant activity.

Implementation:

- o State government operates successful office paper recycling program.
- o University of Wyoming is investigating facility of heat recovery using municipal solid waste as fuel supplement.

REGION 9

ARIZONA - Department of Health Services (DHS)

Planning:

- o no significant activity.

Legislation:

- o Beverage Container Legislation introduced each year; little chance of passage due to voluntary Beverage Industry Recycling Program (BIRP).
- o Waste Oil Recycling Bill introduced for first time this year.

Implementation:

- o Office Paper Separation Pilot Program in one State building; DHS will evaluate with consideration for all State buildings.

CALIFORNIA - State Solid Waste Management Board

Planning:

- o Market studies for San Francisco, Los Angeles, and San Diego Basins conducted.
- o evaluates two curbside collection programs in San Francisco Bay area.

REGION 9 - California (Planning cont'd)

- o developed educational packages on waste reduction for distribution in schools.
- o six refuse-to-energy projects currently being funded by the State for feasibility studies.
- o developing Statewide telephone book recycling program.

Legislation:

- o SB 650: Litter Control, Recycling, and Resource Recovery Act; September 1977, levies tax on litter-producing business; revenues go to counties for litter clean-up, education, and recycling centers.
- o SB 68: Oil Recycling Bill; enacted January 1978; organizes waste oil recycling centers around State; sets up toll-free number for citizens to call for nearest recycling facility.
- o AB 1404: Gage Bill; April 1977; provides 5 percent cost preference for recycled paper over virgin material; provides revenues to review and modify specifications.
- o Beverage Container Legislation still possible, but effort has been diffused by Litter Control, Recycling, and Resource Recovery Act.

Implementation:

- o Statewide Office Building Paper Separation Project; tonnage of recycled paper has fluctuated.
- o State Park Recycling Project; for bottles and cans; experimental in one park; only moderate success.
- o education programs being experimentally implemented in two school districts.
- o State Office of Procurement giving 5 percent preference to recycled paper bidders; thus far, few bidders and no recycled contracts awarded (2 months into program).

GUAM - Environmental Protection Agency

Planning:

- o no significant activity.

Legislation:

- o Beverage Container Legislation proposed; likelihood of passage unknown.

REGION 9 - Guam (cont'd)

Implementation:

- o no significant activity.

HAWAII - Department of Health

Planning:

- o State funded feasibility study for refuse-to-energy projects in County of Honolulu; June 1976.
- o Bonding study for Honolulu project funded by State and conducted by White, Weld Co.; March 1977.

Legislation:

- o Law encouraging State procurement of recycled materials drafted, will be introduced; DOH had no role.
- o Law eliminating language prohibiting long-term contracts drafted; will be introduced; DOH testified against.

Implementation:

- o County of Honolulu has acquired a site for future refuse-to-energy project; currently, no effort is being made to move ahead with the project.

NEVADA - Department of Conservation and Natural Resources

Planning:

- o no significant activity.

Legislation:

- o Beverage Container Legislation introduced repeatedly; little support.

Implementation:

- o no significant activity.

TRUST TERRITORIES

- o no significant activity.

REGION 10

ALASKA - Department of Environmental Conservation

Planning:

- o no significant activity.

Legislation:

- o annually help to draft and support Bottle Bill legislation; outlook for passage is poor.

Implementation:

- o no significant activity.

IDAHO - Department of Health and Welfare

Planning:

- o State investigated markets for secondary materials; results were not encouraging.
- o some refuse-derived fuel potential found in Boise, State's major urban area.

Legislation:

- o State agency drafted and introduced Bottle Bill; revenues would go to finance recycling centers; outlook for passage is not good.

Implementation:

- o staff members supply technical assistance to inquiring locals, universities, etc.

OREGON - Department of Environmental Quality

Planning:

- o in management-by-objective planning, source separation and resource recovery are identified as key priorities of the State.

Legislation:

- o Bottle Bill, 1972; mandatory desposit of all carbonated beverage containers. Enacted.
- o Tax Benefit Bill, 1973; for businesses minimizing pollution (e.g. boilers for refuse-derived fuel). Enacted.

REGION 10 - Oregon (Legislation cont'd)

- o expansion of Bottle Bill being considered to include all glass, product charges, etc.
- o packaging legislation being considered with input from State agency.

Implementation:

- o grant/loan program set up for implementing approved regional and local solid waste management plans (30 percent grant/70 percent low interest loan); State agency staff gives support to projects, evaluates, closely scrutinizes.
- o Statewide resource recovery target: 90 percent waste recovery by 1982.
- o Statewide Recycling Information Office (with Hotline) set up; partially Federally funded.

WASHINGTON - Department of Ecology

Planning:

- o extensive investigation of markets resulting in State Marketing Plan.
- o currently updating Resource Recovery Plan.

Legislation:

- o Model Litter Control Act, 1977; a per-unit charge levied at manufacturers of potential litter product goes to State for litter clean-up and education.
- o Bottle Bill is introduced every year, but State government and Solid Waste Agency do not support it; they would lose the revenue from Litter Control Act.

Implementation:

- o Statewide Recycling Hotline.
- o grant program (50 percent) for implementing solid waste plans; resource recovery projects must prove themselves self-sustaining and successful.

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