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BILL ANALYSIS

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Senate Bill 403 (S-1 as reported)

Senate Bill 404 (S-1 as reported)

Senate Bill 405 (S-1 as reported)

Senate Bill 413 (S-1 as reported)

Sponsor: Senator Vern Ehlers

Committee: Natural Resources and Environmental Affairs

Date Completed: 11-17-87

## RATIONALE

Waste materials are generated by tens of thousands of processes and activities from laboratory work to dry cleaning, from agricultural activities to manufacturing and industrial operations. Many wastes represent a potential risk to human health and the environment, or at the very least, economic investments of time, energy and materials that are lost by society.

Over the last decade, several major corporations have reported significant cost savings through waste reduction. Company-wide incentive programs and research efforts have paid off for many large corporations with new processes and technology that reduce wastes. News of these successes and a nationwide waste disposal crisis have combined to bring waste reduction to the forefront of national attention.

Within the last two years, the National Research Council (NRC), the Congressional Office of Technology Assessment (OTA) and the U.S. Environmental Protection Agency (EPA) have each issued reports identifying waste reduction as the most sensible response to the increasing costs, liability and pollution problems associated with waste management and disposal. These reports and others have called on local, State and Federal governments to take active roles in reducing the generation of hazardous wastes and other potential pollutants. At least a dozen states have already begun programs to help manufacturers, industries, service providers and others reduce the quantity and toxicity of wastes generated. According to most reports, waste reduction is developing into a critical element in improving industrial competitiveness and resolving the nation's waste disposal crisis.

Some feel that Michigan should establish a program that would provide research, technology, information and incentives for developing waste reduction and hazardous waste reduction methods in the State.

## CONTENT

### Senate Bill 403 (Substitute S-1)

The bill would create the "Environmental Technology Act" that would establish the Environmental Technology Board within the Department of Commerce. The board would be required to investigate the establishment of an environmental technology institute to conduct research and develop waste reduction technologies. The board would have to outline the need for the institute, propose its organizational structure, explore possible funding sources, propose a site for, and identify initial research priorities

of the institute. Within 18 months after the effective date of the bill, the board would be required to submit to the Governor and the Legislature a detailed proposal for the establishment of the environmental technology institute.

The bill would be repealed two years after its effective date.

### Senate Bill 404 (Substitute S-1)

The bill would amend the Hazardous Waste Management Act to create the Hazardous Waste Policy Committee within the Department of Natural Resources. The Committee would be required to do the following:

- Prepare an update, no later than January 1, 1990, of the State Hazardous Waste Management Plan that was adopted by the State Natural Resources Commission on January 15, 1982.
- Instruct the Office of Waste Reduction (as proposed in Senate Bill 405) to complete studies considered necessary for the completion of the updated plan.
- Submit the plan to the Natural Resources Commission for adoption.
- Disband upon final adoption of the plan.

The bill also would require that a new committee be appointed every five years following the adoption of the updated plan, to review the updated plan and submit to the Legislature recommendations concerning the implementation of the bill.

The bill is tie-barred to Senate Bill 405, and would take effect October 1, 1988.

### Senate Bill 405 (Substitute S-1)

The bill would create the "Waste Minimization Act" to establish the Office of Waste Reduction within the Department of Natural Resources (DNR). The bill states that the Office would be created to advise the DNR Director "on methods of incorporating waste reduction goals within the department's regulatory and permit programs, including data collection and analysis to advance the concept and implementation of waste reduction". The Office would be required to provide staff, studies, and analyses to the Hazardous Waste Policy Committee (proposed in Senate Bill 404), and information to the Waste Reduction Assistance Service (proposed by Senate Bill 413).

The bill also would require the Director to create a liaison between the Department and the Waste Reduction Assistance Service.

S.B. 403, 404, 405 & 413 (11-17-87)

The bill is tie-barred to Senate Bills 404 and 413 and House Bill 4518. House Bill 4518 would provide for limited storage facilities for hazardous waste.

The bill would take effect October 1, 1988, and would be repealed effective September 30, 1992.

#### Senate Bill 413 (Substitute S-1)

The bill would create the "Waste Reduction Assistance Act" to establish the Waste Reduction Assistance Service, the Waste Reduction Advisory Committee, the Waste Reduction Grants Program, and the Waste Reduction Research Grants Program within the Department of Commerce.

The Waste Reduction Assistance Service would be required to provide information, education, and technical assistance, and provide funding to persons to facilitate a reduction in the amount of waste generated in the State. The Service would be required to place a particular emphasis on in-plant waste reduction. The Waste Reduction Advisory Committee would have to provide technical information and advice for the Service and review grant applications for the Waste Reduction Grants Program and the Waste Reduction Research Grants Program. The Director of the Department of Commerce, upon the advice of the Committee, would select the recipients of the grants. The bill also would require the Director to create a liaison between the Department and the Office of Waste Reduction (proposed by Senate Bill 405).

The bill would define "waste reduction" as any practice, such as an equipment or technology modification, a reformulation or redesign of a product, a substitution of raw materials, or improved management, training, or inventory control, that is undertaken by a person to reduce the volume, quantity, or toxicity of waste that may be released into the environment or that is treated at a location other than the location where it is produced.

The bill is tie-barred to Senate Bill 405. The bill would take effect October 1, 1988, and would be repealed effective September 30, 1992.

A more detailed description of the bills follows.

#### Senate Bill 403 (Substitute S-1)

##### The Environmental Technology Board

The Environmental Technology Board would be created within the Department of Commerce and would consist of the following members:

- The Governor or his or her designee.
- The Director of Commerce or his or her designee.
- The Director of the Department of Natural Resources or his or her designee.
- Six individuals, appointed by the Governor with approval of the Senate, who would include one each from the following: major industry; small business; an environmental organization; a college or university in the State, having expertise in waste reduction technology; business or industry, having knowledge and experience in waste reduction technology; and the general public.

A vacancy on the board would have to be filled in the same manner as the original appointment.

The Governor would be required to select a chairperson from the board members, a majority of whom would constitute a quorum for the transaction of business. The board would hold meetings as considered necessary by the chairperson, and meetings would have to be held in compliance with the Open Meetings Act. The Department of Commerce would be required to provide staff and services to the board as necessary to implement the bill's

provisions. Upon request, the Departments of Natural Resources, Attorney General, and Management and Budget also would be required to provide assistance to the board.

##### Responsibilities of the Board

The Environmental Technology Board would be required to do all of the following:

- Investigate establishing an environmental technology institute that would employ personnel, or contract with individuals, to conduct research and development of waste reduction technologies, placing a particular emphasis on in-plant waste reduction technologies.
- Outline the specific need for the institute.
- Propose an organizational structure for the institute that specified whether the institute would best operate as a private entity, a public entity, a combined public and private entity, or a nonprofit entity.
- Identify likely private sector participants in the establishment of the institute.
- Explore and identify funding sources for the institute.
- Identify estimated start-up costs and recommended annual operating budgets for the institute.
- Recommend appropriate shares of private and public sector funding for the institute at different stages of development, including an examination of possible fee-for-service arrangements.
- Identify initial research priorities of the institute.
- Specify the relationship of the institute to other institutes, State government, and colleges and universities.
- Propose how research conducted by the institute could be transferred for implementation by the private sector.
- Explore the advantages of locating the institute within a college or university, with a particular emphasis on the possibility of attracting the establishment of a college or university hazardous substance research center (as provided for in the Federal Comprehensive Environmental Response Compensation, and Liability Act of 1980) within the institute. If the board's proposal recommended establishing the institute within a college or university, the board would have to recommend an appropriate college or university and analyze the institute's relationship between the State, the college or university, and the private sector.
- Explore opportunities for Federal grants and analyze how the structure and organization of the institute would affect the institute's ability to qualify for these grants.
- Propose an appropriate site for the institute.
- Recommend whether the institute should provide contract lab space or incubator services for bench-scale or demonstration testing of pollution reduction technologies or process changes conceived by other persons in the State.
- Recommend individuals to serve on an initial governing board of trustees for the institute. A member of the Environmental Technology Board could not be recommended to serve on the institute's initial board of trustees.

#### Senate Bill 404 (Substitute S-1)

##### Hazardous Waste Policy Committee

The Hazardous Waste Policy Committee would be created in the Department of Natural Resources. The Committee would consist of the following members, at least one of whom would have to have on-site hazardous waste reduction experience; members would be appointed by the Governor with the approval by the Senate:

- One representative each of city, county, and township government.
- One representing hazardous waste transporters.

- One representing hazardous waste treatment, storage, or disposal facility operators.
- One representative from a general business organization.
- One from an environmental organization.
- One from a conservation organization.
- One from the general public.
- Two from colleges or universities with research specialties related to hazardous waste reduction, treatment or storage, or disposal.

A vacancy occurring on the Committee would have to be filled in the same manner as the original appointment. A chairperson would have to be selected by the Governor. By majority vote the Committee would establish operating procedures, which would have to be made available for public review. Members would be entitled to per diem compensation and reimbursement of expenses, as established annually by the Legislature.

In conducting its business, the Committee would be required to solicit the advice of, and consult periodically with, persons within the State for the purpose of receiving information or advice that could be helpful in the preparation of the updated plan.

#### Updating the State Hazardous Waste Management Plan

The Committee would be required to update, no later than January 1, 1990, the State Hazardous Waste Management Plan that was adopted by the Natural Resources Commission on January 15, 1982. The Hazardous Waste Policy Committee updated plan would be required to:

- Be based upon location of generators, health and safety, economics of transporting, type of waste, and existing treatment, storage, or disposal facilities.
- Include information generated by the Department of Commerce and the Department of Natural Resources on hazardous waste capacity needs in the State.
- Plan for the availability of hazardous waste treatment or disposal facilities that had adequate capacity for the destruction, treatment, or secure disposition of all hazardous wastes that would be reasonably expected to be generated within the State during the 20-year period after the effective date of the bill (as described in the Federal Comprehensive Environmental Response, Compensation, and Liability Act of 1980).
- Plan for a reasonable geographic distribution of treatment, storage, and disposal facilities to meet existing and future needs, including proposing criteria for determining acceptable locations for those facilities. The criteria would have to include a consideration of a location's geology, geography, demography, waste generation patterns, along with environmental and public health factors, and other relevant characteristics as determined by the Committee.
- Emphasize a shift away from "landfilling" hazardous wastes and toward the in-plant reduction, recycling, and treatment of hazardous wastes.
- Include necessary legislative, administrative, and economic mechanisms, and a timetable to carry out the plan.

The Committee would be required to instruct the Office of Waste Reduction (as proposed in Senate bill 405) to complete studies as considered necessary for the completion of the updated plan. The studies could include:

- An inventory and evaluation of the sources of hazardous waste generation within the State or from other states, including the types, quantities, and chemical and physical characteristics of the hazardous waste.

- An inventory and evaluation of current hazardous waste management minimization, or reduction practices and costs, including treatment, disposal, on-site recycling, reclamation, and other forms of source reduction within the State.
- A projection or determination of future hazardous waste needs based on an evaluation of existing capacities, treatment or disposal capabilities, manufacturing activity, limitations, and constraints. Projection of needs also would have to consider the types and sizes of treatment, storage, or disposal facilities, general locations within the State, management control systems, and an identified need for a State-owned treatment, storage, or disposal facility.
- An investigation and analysis of methods, incentives, or technologies for source reduction, reuse, recycling, or recovery of potentially hazardous waste, and a strategy for encouraging the use or reduction of hazardous waste.
- An investigation and analysis of methods and incentives to encourage interstate and international cooperation in the management of hazardous waste.
- An estimate of the public and private cost of treating, storing or disposing of hazardous waste.
- An investigation and analysis of alternative methods for treatment and disposal of hazardous waste.

If the Committee found in preparing the updated plan that there was a need for additional treatment or disposal facilities in the State, the Committee would have to identify incentives the State could offer that would encourage the construction and operation of additional treatment or disposal facilities in the State that were consistent with the updated plan. The Committee would be required to propose criteria that could be used to evaluate applicants for the incentives.

Upon completion of the plan, the Committee would be required to publish, in a number of major newspapers in the State and in a statewide news release, an announcement concerning the availability of the updated plan for inspection or purchase. The announcement also would be required to indicate that not less than six public hearings would be conducted before formal adoption of the plan. The first public hearing could not be held until 60 days had elapsed from the date of the notice. The remaining public hearings would have to be held within 120 days after the first public hearing at approximately equal time intervals.

#### Adoption of the Plan

After the public hearings, the Committee would have to prepare a written summary of the comments received, provide comments on the major concerns raised, make amendments to the updated plan, and recommend to the Natural Resources Commission whether the updated plan should be adopted. The Commission, with the advice of the Director of Public Health, would be required to adopt or reject the updated plan within 60 days or at the second scheduled Commission meeting after receiving the plan. If the Commission rejected the plan, it would have to indicate its reason for the rejection and return the plan to the Committee, which would have 30 days to make necessary changes and resubmit the plan. The Commission would have to make a final decision on the updated plan within 120 days after receiving it. If the Commission did not formally adopt or reject the updated plan within the 120 days, the plan would be considered adopted.

After the updated plan was adopted by the Commission, the Director could not issue a permit or license under this bill for a treatment, storage, or disposal facility until the

Director had made a determination that the action was consistent with the updated plan. This would not apply to a license or permit that was granted before the final adoption of the updated plan, but in such a situation a license or permit would have to be consistent with the Hazardous Waste Management Plan adopted by the Commission on January 15, 1982.

A new committee would have to be appointed every five years following the adoption of the updated plan by the Natural Resources Commission, in the same manner as provided in the bill for appointment of the original Committee. The new committee would be required to review the updated plan, amend it as necessary, review the implementation of the Act, and submit to the Legislature recommendations regarding the Act's implementation. Not more than 180 days after the final adoption of the updated plan, the Director would have to submit to the Legislature the proposed rules to implement the plan.

#### Repeals

The bill would repeal Section 8 of the Act, which established the State Hazardous Waste Management Planning Committee that created the State Hazardous Waste Management Plan adopted by the Natural Resources Commission on January 15, 1982.

The bill also would repeal Section 14 of the Act, which gives the Director of the Department of Natural Resources authority to issue permits and licenses for hazardous waste treatment, storage, or disposal facilities included in the Act prior to the adoption of the Hazardous Waste Management Plan by the Natural Resources Commission.

#### Senate Bill 405 (Substitute S-1)

##### Office of Waste Reduction

The Office of Waste Reduction, to be created within the Department of Natural Resources, would be required to employ personnel and provide support staff as necessary to implement the bill. The Office would be required to do all of the following, with a particular emphasis on in-plant waste reduction:

- Identify opportunities to encourage waste reduction through the Department's regulatory and permit programs.
- Identify how waste reduction efforts should be documented in environmental impact statements.
- Analyze and make recommendations on the value of imposing statewide goals or goals for particular wastes, or both, for waste reduction, minimum recycling standards, and waste treatment standards.
- Publish an annual analysis of waste reduction efforts and potentials in the State.

In addition, the Office would be required to place a particular emphasis on the reduction of hazardous waste as defined in the Hazardous Waste Management Act. The requirement would be "consistent with the national policy of the United States that, whenever feasible, hazardous waste is to be reduced or eliminated as expeditiously as possible".

##### Hazardous Waste Policy Committee

The Office would be required to do both of the following for the Hazardous Waste Policy Committee (proposed in Senate Bill 404):

- Provide staff and services.
- Complete studies upon request and provide information generated by those studies.

The Department would have to assure that relevant information received under the Federal Superfund Amendments and Reauthorization Act was transmitted to the Committee by the Office.

#### Reporting

The Office would have to report by January 1 of each year to the Legislature, Governor and Chairpersons of the Appropriations Committees in the Senate and House. The first report would have to include information concerning its efforts of waste reductions and recommended changes in policies and regulatory approaches that would encourage waste reduction.

#### Liaison

The Director would be required to designate one individual from the Department to serve as a liaison between the DNR and the Waste Reduction Assistance Service (which would be located in the Department of Commerce, pursuant to Senate Bill 413) on all matters related to waste reduction.

#### Senate Bill 413 (Substitute S-1)

##### Waste Reduction Assistance Service

The Waste Reduction Assistance Service would be required to establish a waste reduction information clearinghouse that would do the following:

- Upon request, provide specific waste reduction information to any person.
- Publish information describing waste reduction technologies.
- Distribute available publications pertaining to waste reduction.
- Sponsor waste reduction workshops targeted at specific industries.
- Participate in conferences and meetings of business organizations.
- Provide information and application forms as necessary for Waste Reduction Grant programs.

The Service could contract to have any of the above activities performed by persons other than Department personnel.

The Service also would be required to provide technical assistance regarding waste reduction to business and industry throughout the State, and to provide all of the following:

- Instruction on self-conducted waste audits.
- On-site assistance to business and industry.
- Other information and assistance that was considered appropriate by the Service.

The Service would have to report prior to January 1 of each year to the Legislature, the Governor, and the Chairpersons of the Appropriations Committees in the Senate and House. The Department of Commerce would be required to employ personnel and provide staff and services as necessary to administer the Service and implement the bill. During the first year that the Service was in operation, the Department would be required to promote the Service actively and take steps to inform persons of programs and assistance offered by the Service.

##### Waste Reduction Advisory Committee

Created within the Department of Commerce, the Waste Reduction Advisory Committee would consist of one member from each of the following areas, to be appointed by the Governor with the approval of the Senate:

- Major industry.
- Small business.
- An environmental organization.
- The general public.

The Governor would select one member to serve as chairperson, who would decide when the Committee would meet. Members would be appointed for terms of two years each, with three of the members first appointed serving three years. A vacancy on the Committee would be filled in the same manner as the original appointment. A member whose term expired could not continue to serve unless he or she had been reappointed by the Governor with the approval of the Senate. Meetings would have to be held in compliance with the Open Meetings Act.

The Committee would be required to do all of the following:

- Advise the Waste Reduction Assistance Service on the administration of the Waste Reduction Information Clearinghouse and the technical assistance program.
- Provide information to the service regarding waste reduction technology.
- Review applications and make recommendations to the Director of the Department of Commerce regarding waste reduction grants available under the bill.

#### The Waste Reduction Grants Program

The Department of Commerce would be required to establish the Waste Reduction Grants Program. Information and applications for grants would be provided upon request through the Waste Reduction Assistance Service. The application form would have to be provided by the Department and contain information required by the Director. The Service also would be required, upon request, to make referrals and provide information about other State and Federal agencies and programs under which funding alternatives could be available.

The Director, after considering the recommendations of the Waste Reduction Advisory Committee, would be required to make waste reduction grants for either or both of the following purposes:

- To fund projects that demonstrated new and emerging waste reduction technologies. A grant made for this purpose would have to require that information generated by the project be available to the Service for distribution through the Waste Reduction Information Clearinghouse.
- To fund waste reduction projects.

In making grants, the Director would be required to consider all of the following:

- The severity of the waste problem being addressed.
- The extent to which the technological development would reduce waste at its source.
- The potential for the application of the technology to other persons.
- The ability of the applicant to contribute matching funds.
- The percentage reduction of volume or quantity or toxicity of waste that would be achieved.
- Whether the project were consistent with State law and policy.
- Additional criteria the Director considered appropriate.

#### Waste Reduction Research Grants Program

The Department would be required to establish the Waste Reduction Research Grants Program. Information and applications for grants would have to be distributed upon request through the Service. The application for a grant would have to be provided by the Department and contain information required by the Director.

The Director, after considering the recommendations of the Committee, would be required to make grants to colleges and universities, nonprofit corporations, or industry associations or other persons for industry specific research projects pertaining to waste reduction. In making the research grants, the Director would have to consider the same factors that would have to be considered for a waste reduction grant. The Director also would have to consider the likelihood of the applicant's project qualifying for other research grants or subsequent research grants from other sources.

#### Liaison

The Director would be required to designate one individual from the Department to serve as a liaison between the Department and the Office of Waste Reduction (as proposed by Senate Bill 405) in the Department of Natural Resources, on all matters that would relate to waste reduction.

### **FISCAL IMPACT**

#### Senate Bill 403 (Substitute S-1)

The bill would have a fiscal impact on the State resulting in an expenditure increase of approximately \$5,000 per year to cover incidental expenses of the nine-member Environmental Technology Board.

#### Senate Bill 404 (Substitute S-1)

The bill would have a fiscal impact of \$55,000 per year for approximately 1-1/2 years. This assumes that the Legislature would authorize a per diem of \$75 (the same as currently authorized for the Natural Resources Commission) that the 11-member Hazardous Waste Policy Committee would meet five days per month (\$49,500); and that each member would incur \$500 in incidental expenses (\$5,500).

#### Senate Bill 405 (Substitute S-1)

This bill would have a fiscal impact of approximately \$200,000 per year. It is believed that 3 FTEs, at an average of \$55,000 per FTE, would be required for the Office of Waste Reduction, plus \$35,000 for contractual services, supplies and materials.

#### Senate Bill 413 (Substitute S-1)

This bill would have a fiscal impact on the State of approximately \$92,000 to \$200,000 per year in increased expenditures. This includes \$2,000 in expenses for the five-member Waste Reduction Advisory Committee and one to three FTEs at an average of \$55,000 per FTE to administer the clearinghouse and grant programs, plus \$35,000 for contractual services, supplies and materials.

### **ARGUMENTS**

#### **Supporting Argument**

Very little information is currently available concerning waste reduction efforts now underway in Michigan or the potential for further waste reduction gains in various industry sectors. Analyses conducted under the bills would aid efforts in targeting clients with the greatest waste reduction potential, and provide useful data upon which to base policy decisions should the State consider a regulatory approach to waste reduction in the future.

#### **Supporting Argument**

The bills would promote environmental protection by emphasizing pollution prevention, as opposed to management of generated wastes. The bills also emphasize assistance to industry rather than new regulation. Because waste reduction efforts often result in cost savings for industry, activities of the proposed waste

reduction assistance service would result in economic benefits to companies. Additionally, the service would create an important focal point for promoting the economic and environmental benefits of waste reduction.

### ***Supporting Argument***

While many waste reduction techniques have already proven successful, others are still in the developmental stages. Additional research is needed to demonstrate the effectiveness of new waste reduction techniques. Accompanied by effective technology transfer efforts, the research provided by the Environmental Technology Institute, proposed by Senate Bill 403, would directly benefit Michigan companies and environmental quality. New products or processes invented at the institute would contribute to economic development in Michigan.

### ***Supporting Argument***

Amendments to the Federal Superfund Law require each state to certify that capacity is available to manage all hazardous wastes generated in the State for the next 20 years. Revision of the State plan for hazardous waste disposal proposed by Senate Bill 404 would assist in providing this capacity assurance to the Environmental Protection Agency.

### ***Supporting Argument***

The Waste Reduction Assistance Service, proposed by Senate Bill 413, would help promote the practice of waste reduction in an approach that would be consistent with other programs of the Department of Commerce in its technical assistance efforts. The service should help Michigan companies reduce environmental compliance costs, helping them to become more competitive.

### ***Supporting Argument***

The DNR does not currently provide a "consulting team" approach to assist companies in hazardous waste reduction. The Department's present waste reduction efforts are focused primarily on municipal solid waste, supported by programs such as the Clean Michigan Fund. The Department of Commerce also does not presently offer any services designed to encourage waste reduction. It does, however, operate the Michigan Modernization Service (MMS), a technical assistance effort designed to help manufacturers adopt advanced technologies. The waste reduction initiatives proposed in the waste reduction package of bills would provide a needed focus for State government efforts to encourage waste reduction. The business community, especially the small business community, and the environment would benefit.

### ***Supporting Argument***

Many small companies are frightened and confused by much of the Federal and State environmental regulation, reporting requirements, and other responsibilities for handling hazardous waste. Often, for fear of doing something illegal, they play it safe by using the more established and traditional disposal techniques. To date, most money spent on disposal is for incineration of waste rather than prevention or reduction. Businesses are afraid of trying something new. There is a great need for education on behalf of the waste generators to overcome such resistance. The waste reduction bill package would help small businesses who lack the dollars and technical knowledge to help reduce hazardous waste and potentially reduce their operating expenses as a result of that reduction.

Legislative Analyst: B. Baker  
Fiscal Analyst: A. Rich

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This analysis was prepared by nonpartisan Senate staff for use by the Senate in its deliberations and does not constitute an official statement of legislative intent.