SFA BILL ANALYSIS

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Senate Bill 65 (Substitute S-2 as passed by the Senate)
Senate Bill 66 (as passed by the Senate)
Senate Bill 297 (Substitute S-2 as passed by the Senate)
Sponsor: Senator John D. Cherry, Jr.
Committee: Natural Resources and Environmental Affairs

Date Completed: 10-22-87

RATIONALE

In 1980, the United States Congress passed the Low Level Radioactive Waste Policy Act. The legislation required that each state be responsible for the safe and adequate disposal of low-level radioactive waste generated within its borders. Currently, such radioactive waste is stored only at Federally licensed disposal sites in the states of Nevada, Washington, and South Carolina. Low-level waste comes primarily from nuclear power plants in the form of filters, resins, protective clothing, tools, and internal reactor components. Approximately 80% of the waste is produced by nuclear plants. Other low-level waste material needing disposal includes radioactive contaminated gloves, vials and syringes from hospitals, biowaste from research institutions, and refuse from industry. The Federal Act states that a regional approach, in which states enter into interstate compacts is the safest, most effective means of waste disposal. By passing Public Act 460 of 1982, Michigan agreed to participate in the Midwest Low Level Radioactive Waste Compact. Other states in the Compact are Indiana, Iowa, Minnesota, Missouri, Ohio, and Wisconsin.

In 1985, Congress passed the Low Level Radioactive Waste Policy Amendments Act which permits Nevada, Washington, and South Carolina to continue accepting waste until January 1, 1993, when all states will be required to have made provisions for disposal of state-generated waste. In addition, the legislation imposes strict deadlines for individual states or regional compacts to establish disposal facilities for waste, with penalties to be enacted for failure to meet one of the milestones. By January 1, 1988, each region will have to have selected a state within its membership to host a disposal facility, and that host state will be required to have a plan for establishing the location of a facility. Recently, Michigan was chosen by the Midwest Compact to be the host state for the region's disposal facility. The selection of Michigan was based primarily on the volume of waste generated in the State, as it produces the most low-level radioactive waste in the Compact, accounting for approximately 36% of the region's total. Thus, Michigan is faced with the challenge of meeting the Federal deadline of January 1, 1988, for having a plan developed for taking responsibility for low-level waste generated within its borders and in those states with whom we have entered into the Compact.

CONTENT

Senate Bill 65 (S-2) would amend the Public Health Code to provide that the Department of Public Health would have regulatory responsibility in all matters relating to the generation, storage, processing, handling, transporting, possession, or disposal of low-level radioactive waste in the State. The bill would establish the application process for a construction and operation license for a low-level radioactive waste facility. The bill also would establish permits, fees, and requirements for low-level radioactive waste generators, carriers, processors, and collectors, and provide for penalties for violation of the bill's provisions.

Senate Bill 66 would amend Public Act 113 of 1978 (which regulates the deposit and storage of radioactive waste) to create a new exemption to the State's ban on depositing or storing radioactive waste. The exemption would apply to low-level radioactive waste that was disposed of in accordance with both Public Act 460 of 1982 (the Act providing for Michigan's participation in the Midwest Interstate Low Level Radioactive Waste Compact) and Senate Bill 65.

Senate Bill 297 (S-2) would create the "Low Level Radioactive Waste Authority Act" to establish the Low Level Radioactive Waste Authority within the Department of Management and Budget. The bill would establish the process for selecting a host site for a low-level radioactive waste disposal facility within the State to be designated by May 1, 1989, and establish a review board, local monitoring committees, arbitration and negotiation processes, disposal fees and surcharges, and an international low-level radioactive waste research education institute.

The three bills are tie-barred.

A more detailed explanation of the bills follows.

Senate Bill 65 (S-2)

Department of Public Health (DPH) Responsibilities

The DPH would have the regulatory responsibility in the State for all matters related to the generation, storage, processing, handling, transporting, possession, or disposal of low-level radioactive waste. The Department would have to coordinate all regulatory activities of State agencies and Departments that acted within the scope of their responsibilities related to waste. The DPH Director could promulgate rules, issue orders, and take other actions as authorized by law to implement and enforce the bill. The Departments of Agriculture, Management and Budget, Commerce, Natural Resources, State Police, and Transportation, and other State departments and agencies would have to consult and cooperate with the DPH and assist in the implementation of the bill.

The DPH would be required to enter into negotiations with the Federal government on behalf of the State for full

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agreements that would provide for the discontinuance of specified Federal authority with regard to the disposal of low-level radioactive waste and the assumption of that authority by the State. The Governor, with Senate approval, could enter into one or more agreements with the Federal government, negotiated pursuant to the bill. The DPH would have to review all laws and rules pertaining to the Low Level Radioactive Waste Authority (as proposed in Senate Bill 297), the disposal site, and generators, carriers, and processors. By April 1, 1988, the DPH would have to recommend to the Governor whether additional or more stringent regulations would be required to protect the public health, safety, and welfare, and the environment. In addition, the Department would have to recommend to the Legislature whether the State should include naturally occuring or accelerator produced radioactive materials known as N.A.R.M. waste in the definition of waste that could be disposed of in the disposal site.

The Director of the DPH, or the Director's designee, with the assistance of other State departments, would be required to do all of the following:

- Implement a regulatory, inspection and enforcement program to carry out the provisions of the bill.
- Issue a construction and operating license to the Authority upon the Authority's submission of an application that was in compliance with the requirements of the bill.
- Issue permits to generators, carriers, collectors, and processors, if all the requirements of the bill had been met.
- Assure that the Authority fulfilled its responsibility under the bill and Senate Bill 297.
- Take necessary action as authorized under the Administrative Procedures Act.
- Contract as necessary for research and services to assist in the implementation powers and duties of the DPH under the bill.
- Insure maintenance of records of all waste generated, transported, processed, collected, and disposed of in the State, including records pertaining to the operation of the disposal site, the site, site closure and stabilization, and institutional control.
- Review monthly reports submitted by the Authority and take responsive action regarding any discrepancy or other matter considered necessary after reviewing the reports.
- Audit biannually all records pertaining to manifests maintained by the Authority.
- Develop and implement polices and programs to insure public participation in the regulation of the disposal site.
- Review and comment on the site selection process developed by the Authority.
- Review and approve or disapprove the schedule submitted by the Authority for inspection of the disposal site construction.
- Review for completeness only the contracts entered into by the Authority.
- Review the Authority's recommendations for sanctions against a generator, carrier, collector, or processor whom the Authority suspected had violated a provision of the bill.
- Assure that the Authority charged "just and reasonable" fees and surcharges for waste disposal and obtained through the Midwest Interstate Low Level Radioactive Waste Commission sufficient funds to cover expenses.
- Seek appropriations from the General Fund and the Low Level Radioactive Waste Management Fund to fulfill the responsibilities of the DPH under the bill.
- Approve or disapprove a waiver by the Authority of one or more of the criteria for the selection of three candidate sites as proposed in Senate Bill 65. If the Director approved the waiver, the approval would indicate the Director's determination that the waiver would not compromise the public health, safety, or welfare, or the environment. In addition, it would indicate that a candidate site for which a waiver were sought was appropriate despite the site's inability to meet one or more of the required criteria.

Low Level Radioactive Waste

A person could not possess, generate, collect, process, package, store, transport, or dispose of low-level radioactive waste without complying with the requirements of the bill. If the State had not obtained full agreement status with the Federal government, a person could not dispose of waste in the State except in the disposal site licensed by the United States Nuclear Regulatory Commission, and by the Director of the DPH through issuance of a construction and operating license under the bill. If the State had obtained full agreement status, a person could not dispose of waste in the State except in the disposal site licensed by the Director through the issuance of a construction and operating license under the bill.

The Director, with the written concurrence of the Authority, could grant or deny an application for a waiver of the requirement that waste be disposed of only in the disposal site if either of the following occurred:

- If the State had obtained full agreement status with the Federal government, the DPH approved the disposal of the waste in a location other than the disposal site and concluded that the waiver would not harm the public health, safety, or welfare, or the environment, and would not substantially impact on the volume of waste available for the disposal site or its financial solvency.
- If the State had not obtained full agreement status with the Federal government, the DPH concluded that any waiver granted by the Nuclear Regulatory Commission would not harm the public health, safety, or welfare, or the environment and would not substantially impact on the volume of waste available for the disposal site or its financial solvency.

The DPH would have to assure that waste generated in a state that was not a member of the Compact would not be accepted for the disposal site except upon the affirmative vote of the Commission as required in the Compact. The DPH also would have to assure that the State did not accept waste for disposal from any Compact member who either:

- Was delinquent in paying dues or fees; or
- Failed to establish or maintain a permitting and regulatory system for generators, carriers, processors, and collectors of waste.

If Michigan withdrew from the Compact and did not enter any other Compact, the DPH would have to assure that the disposal site accepted only waste that was generated in the State. After December 31, 2013, the DPH could not authorize the acceptance of waste at the disposal site.

Minimum Criteria for the Disposal Site

No later than September 1, 1988, the Director of the DPH, after consulting with the DNR, would have to establish minimum criteria for the design, construction, and operation of the disposal site. The minimum criteria would have to reflect and be updated to include state of the art technology. The criteria would have to be developed and prepared in the form of specifications to be included in the construction and operating license issued to the Authority, and would have to comply with criteria adopted

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under the Atomic Energy Act, and regulations pertaining to Federal licensing requirements for land disposal of waste (10 C.F.R. 61.1-61.81). Shallow land burial would not be permitted, with acceptable disposal technologies limited to above- and below-ground canisters and above- and below-ground vaults. Criteria also would have to include provisions for monitoring at the disposal site and within the disposal unit, and for the recoverability of waste that had been disposed of in the site.

Licensing Requirements

Licensing requirements for disposal site design, construction, and operation would have to be at least as stringent as all applicable Federal requirements. The Director of the DPH would have to establish the licensing requirements that would reflect practices necessary to protect the public health, safety, and welfare, and the environment, and include at least all of the following:

- Requirements and performance standards for the operation of the disposal site.
- Requirements and standards for record keeping and data collection by the Authority.
- Requirements, training, and standards for the personnel who would operate, monitor, and maintain the site.
- Requirements and standards for emergency closure of the site.
- Requirements and standards for postclosure observation and maintenance, postclosure ownership, monitoring, maintenance, and use, if any, of the site.
- Requirements for the amounts, sources, form, chemical and physical composition, and concentrations of the waste that could be accepted at the site.

Construction and Operation License Application

A disposal site could not be constructed or operated in the State without a license issued by the Director. The Director could consider only an application for a license submitted by the Authority, except when the Authority submitted a license that had been prepared for the Authority pursuant to an agreement or contract entered into by the Authority as outlined in Senate Bill 65. An application for a construction and operating license would have to contain all of the following information about the disposal site:

- The mailing address of the Authority.
- The location of the host site.
- A hydrogeological report that specified hydrogeological characteristics that existed.
- A monitoring program acceptable to the DPH and consistent with groundwater quality standards promulgated by the DNR.
- A performance assessment.
- Engineering plans and specifications for construction.
- A detailed basis for design specifications.
- The disposal technology.
- Procedures for postclosure monitoring.
- Operating procedures.
- A site closure and stabilization plan.
- Postclosure observation and maintenance plan and an institutional control plan.
- Estimates of the quantities and types of waste to be stored, treated, or disposed of at the site.
- The personnel information necessary to assure the integrity and qualification of those hired by the Authority.
- A contingency plan to establish the procedure to be followed in the event of a release of radioactivity.

If any information required to be included in the application regarding a person undertaking a responsibility of the Authority changed or was supplemented after the filing of the statement, that person would have to provide the new information within 30 days of the change or addition. An application for a license would have to be accompanied by a nonrefundable application fee to be determined by the Department.

In addition, a license could not be transferable from the office of the Authority.

The application would have to contain additional information that would be required by the Department and all of the following information regarding persons who entered into agreements or contracts to prepare a construction and operating license for the disposal site or for the construction or operation of the disposal site, if known:

- The full name and business of all of the following: Each person who entered into an agreement or contract to undertake a responsibility of the Authority; the five persons who held the largest shares of the equity in or debt liability of the person who undertook a responsibility of the Authority (although this requirement could be waived for a person who was a corporation with publicly traded stock); if know, the three employees who would have the most responsibility for the day-to-day operation of the site; and any other entity listed in which any of the persons listed above had at any time had 25% or more equity in or debt liability of that business entity.
- All convictions for criminal violations of an environmental statute for each person required to be listed in this part of the bill. If debt liability were held by a chartered lending institution, information required in this part of the bill would not be required from that institution.
- All environmental permits or licenses issued held by each person and any of those permits or licenses that were permanently revoked because of noncompliance.
- All activities at property owned or operated by each person if the activity resulted in a threat or potential threat to the environment.

Notwithstanding any other provision of law, the Director could nullify a contract between the Authority and a person if there were any of the above information were originally disclosed or as supplemented.

The Authority would be responsible to supplement, and keep current the above information, and provide the DPH with such information for persons with whom the Authority entered into agreements or contracts following the original submission of an application for a construction and operating license.

Bond Requirements

The Authority, as part of the application for a construction and operating license, would be required to file surety bonds or other suitable instruments or mechanisms, or secured trust funds, that would have to be approved by the Department and cover the cost of site closure and stabilization, and postclosure observation and maintenance and institutional control. The methods of financial assurance would be adjusted periodically by the Department to account for inflation or changes in the permitted level of operation of the site. A failure to maintain the method of assurance would constitute a violation of the bill's provisions.

The Authority, as part of the application for a construction and operating license, also would have to demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden and accidental radioactive releases from the disposal site. This would have

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to be done through the establishment of a fully funded trust fund or a liability bond, or both. In addition, the Authority would have to obtain and maintain liability coverage for accidental releases of not less than $3 million per occurrence with an annual aggregate of not less than $6 million, and additional coverage sufficient to meet anticipated legal defense costs.

Application Processing

Upon receipt of an application for a construction and operating license, the Department would be required to do all of the following:

- Within 45 days, determine whether the application were complete, and notify the Authority of all deficiencies.
- Immediately notify the local monitoring committee of the host site community, the governing body of the county in which the host site was located, and State departments that would be impacted, of the receipt of an application.
- Publish a notice in newspapers that contained a map indicating the location of the host site, a description of the host site, and where the complete application package could be reviewed or copies obtained. The notice also would have to describe the procedure by which a license could be granted or denied. Notices would have to be in a newspaper with Statewide circulation, one that had major circulation in the municipality in the immediate vicinity of the host site, and one in the county of the host site. The Director would have to provide an opportunity for public comment at least 60 days before making a final decision to grant or deny an application.
- Review the entire application with other State departments that would be affected. The review would have to include, but not be limited to, considerations that pertained to air quality, water quality, waste management, hydrogeology, proposed waste transportation routes, the protection of the public health, safety, and welfare, and the environment, and be completed within 140 days after an application was received. The Department would have to assure that all concerns of the Low Level Radioactive Waste Review Board (as outlined in Senate Bill 297), the local monitoring committee (also proposed by Senate Bill 297), the governing body of the county in which the site was located, and affected State departments were considered. A written and signed review by each person representing a department who reviewed the application would have to be reviewed by the Department, followed by the preparation of a draft license by the Department. In addition, the Department would have to prepare a responsive summary that described public comments received by the Department and how those comments had been evaluated and addressed by the Department.

The Director would have to make a decision to issue a construction and operating license or deny the application for a license as soon as was practicable, but not later than 12 months after the receipt of a complete application that was in compliance with the bill. If the Director denied the Authority's application, the Director would have to state his or her reasons in writing. If the application met all the requirements and rules of the bill and the Department had prepared a draft version, the Department would prepare and issue to the Authority a construction and operating license. The Departments of Agriculture, Natural Resources, State Police, and Transportation, and other State departments and agencies would have to consult and cooperate with the DPH in a timely review of an application. The Department also could seek the advice of others in evaluating the application, developing a draft license or a final license, or both.

Except as provided in the bill, the issuance of a license by the Director would exempt the Authority from having to obtain other permits, licenses or registration that could be required under other applicable State laws. It would not exempt the Authority from meeting other standards and requirements of applicable State or Federal laws or from obtaining an operating license pursuant to the Hazardous Waste Management Act, before construction began. A local ordinance or permit requirement or other local requirement could not prohibit the construction or operation of the disposal site.

Amendments to the License

If the Authority proposed an amendment to the license, or if the Director determined that amendments were necessary to conform to the bill, the Director could amend the license issued to the Authority to protect the public health, safety, and welfare, and the environment. An amendment would have to specify the time required to complete any required modifications. The Director could prescribe a fee to be paid by the Authority from revenues collected by the facility that would be sufficient to cover the Department's costs in the processing and modifying the license. A license would be subject to amendment as provided in the Administrative Procedures Act.

Disposal Site Construction

Prior to beginning construction of the site, the Department would be required to enter into a contract with an independent contractor who would have to inspect and verify the progress of the disposal site construction, and whether the site complied with the bill's provisions. The results of the inspection would have to be filed in writing with the Department before the operation of the site was authorized, and would be available to the public for review. The Department would have to assure that all deficiencies noted in the inspection would be addressed to the Department's satisfaction before operation of the site began.

Site Closure

The Director could issue an order temporarily or permanently closing the disposal site prior to its scheduled closing date if the Director found that there was a potential hazard to the public health, safety, or welfare or the environment that justified such action. A temporarily closed site could not receive waste and would have to remain closed while remedial action was taken. Before reopening a site, the Department would have to seek the advice of the local monitoring committee of the host site community and explain its reasons for reopening.

If there had been a release of waste at the disposal site during its operation, closure, or postclosure, the Department would have to assure that the Authority took appropriate remedial action. If there were a release that required the site to be closed permanently, the Department would have to assure that the site closure and stabilization was complete and that the Authority regained control of the disposal site through the period of institutional control. The cost of closure and stabilization would have to be paid from the Low Level Radioactive Waste Management Fund as outlined in Senate Bill 297.

Beginning on January 1, 2014, or prior to that date if the site had been permanently closed for any reason, the Authority would have to begin site closure and stabilization. The Department would have to assure that the site closure and stabilization was complete and adequate and that the Authority retained control of the disposal site. The cost of site closure and stabilization would have to be borne by the Authority.

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The Department would be required to promulgate rules pertaining to site closure and stabilization and the active surveillance and maintenance of the site. The Authority would have to assure that, for at least five years after site closure and stabilization, active surveillance and maintenance of the site occurred in accordance with license requirements and conditions and provisions of the bill. At the end of that period of time, the Authority would be required to retain control of the site through the period of institutional control.

Waste Shipment

The Authority would be required to establish and implement a disposal shipment registration system that required, at a minimum, a valid disposal shipment certificate to accompany each shipment of waste to be delivered to the disposal site. An approved disposal shipment certificate would be valid for no more than three days, and would have to specify, at a minimum, all of the following:

- The date on which the shipment would be delivered to the site. The date would have to be one of the three days for which the disposal certificate was valid.
- The hours during which a shipment would be delivered.
- The name of the carrier, type of transport vehicle, type of shipping container or cask, type of disposal container, and the applicable Department of Transportation hazard classifications.
- The transportation route.
- The amount, type, class and curie count of waste to be included in the shipment.

A generator, processor, or collector who was arranging the transport of waste to the site would have to submit to the Authority an application for a disposal shipment certificate for each shipment. The application would be made on a form provided or approved by the Authority. An application would have to be submitted at least 15 days, but not more than 30 days, prior to delivery. A generator, processor, or collector who was arranging the transport of waste would have to ensure that a carrier who transported the waste had been supplied with the information that was required on the shipment certificate. The carrier also would be required to comply with the requirements of the shipment certificate.

The Authority would have to approve or deny each application withinn ten days. An application would not be approved unless the Authority had signed the certificate and assigned on it a disposal shipment certificate number, which would have to be placed on each manifest that was part of the approved waste shipment on the certificate.

Acceptance of Waste Delivery

The Authority or any other person could not accept delivery of waste unless it were accompanied by a manifest certified by each generator, carrier, processor or collector who possessed the waste and who was authorized to do so under the bill. In addition, the location of acceptance would have to be the same as the destination indicated on the manifest. When the Authority accepted waste at the site it would have to do all of the following:

- Keep permanent records as required by the Department.
- Compile an annual report on the disposal site, the volume and type of waste placed in the disposal unit, and any other information required by the Department.
- Make manifest copies, certificates of disposal, and reports available for review and inspection at reasonable times by the Department or a peace officer.
- Certify on the manifest receipt of the waste and furnish a copy of the manifest to the generator within ten days after receipt.
- Within 30 days of receipt of waste notify the generator whether the manifest was properly completed.

Each shipment of waste that arrived at the disposal site could not proceed into the unloading area until it was inspected by both the Department and the Authority and found to be in compliance with the bill. Shipments that were not in compliance would have to proceed to a controlled area for action to remedy the noncompliance or the Authority could refuse to accept the waste. If the waste were refused, the Authority could order the waste returned by the carrier to the generator or processor who contracted with the carrier to transport the waste. The Authority could seize and impound a vehicle and the contents of that vehicle if it transported waste in a manner that was not in compliance with the bill. In addition, the Authority could impose surcharges pursuant to the provisions in Senate Bill 297. A vehicle would be impounded until the Department informed the Authority that appropriate remedial and enforcement action had been concluded. The Authority would have to notify the Department and the local monitoring committee of the noncomplying shipment.

Shipments that were found to be in compliance would proceed to the unloading area. After a transport vehicle was unloaded, or left the unloading area without being unloaded, it could not leave the disposal site until it was inspected by an agent of the Authority and the Department and decontaminated, if necessary. The Authority would have to inform the Department promptly of any violation of the bill or Senate Bill 279 by a generator, collector, carrier or processor.

List of Generators, Carriers, Processors and Collectors of Waste

By March 1, 1989, the Department would have to obtain from the Commission a list of generators, carriers, processors and collectors who were operating lawfully in each Compact member state. The Department also would have to obtain the pertinent state laws and rules that regulate waste that had been submitted to the Commission by the Compact member states. The Department would also have to compile a list of all generators, carriers, processors and collectors who held valid permits issued in the State under the bill, and submit it to the Commission prior to March 1, 1989. The Department would have to determine which Compact member states had established and maintained to the satisfaction of the Department a permitting and regulatory system, including penalties and remedies, that equaled or exceeded the laws and rules of this State regarding waste generators, carriers, processors and collectors. The Department would have to prepare a master list that included only the names of generators, carriers, processors and collectors from those Compact member states.

Permits and Equivalent Privileges

The Department would be required to permit the Authority to receive waste only from a generator, carrier, processor, or collector whose name was on the master list and who held a valid permit issued in this State or a valid permit issued by a Compact member state that had equivalent privileges because that state had established and maintained to the satisfaction of the Department a permitting and regulatory system that equaled or exceeded the laws and rules of this State. A Compact member state that established and maintained such a permitting and regulatory system, by accepting equivalent privileges in this State, give its consent to the requirements of the bill, and the provisions of the Low Level Radioactive Waste Authority Act outlined in Senate Bill 297. In addition,

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Compact member states would be considered to have consented to share with this State and other Compact member states the expenses incurred in the construction, operation, site closure and stabilization, postclosure observation and maintenance, and institutional control of the disposal site.

The Department would have to issue a permit only to a generator, carrier, processor, or collector whose primary place of business is in this State. The permit would only enable the person to transport, process, or collect waste that was generated in this State.

Permit to Generate, Transport, Collect, or Process Waste

A person could not generate, transport, collect, or process waste in the State unless he or she held a generator's, carrier's collector's, or processor's permit, respectively issued under the bill. The Department would have to assign an identification number to each person who was issued a permit or who had been granted equivalent privileges in this State.

The bill provides that a permit would have to include requirements as provided in the bill and in Senate Bill 297, and conditions that were equivalent to applicable Federal requirements. Other conditions could be imposed after the Department had submitted to the Governor and the Legislature the written recommendations concerning waste disposal as provided in the bill. A permit would be valid for three years after the date of issuance.

Upon receipt of an application for a permit, the Department would have to issue or renew a permit if it determined that the applicant met the requirements of the bill. An application for a permit would have to contain all of the following information:

- The estimated quantities and types of waste generated.
- The procedures and methods to be used for responding to a release of waste. (An applicant for a processor's permit also would have to include an analysis of the potential pathways for a release of waste to the environment and the potential impact of a release.)
- The location and use of interim storage and transfer facilities, if any.

Each person who submitted an application for a permit or permit renewal would be required to pay a permit application fee of $500. A generator's or carrier's permit could not be transferable, and would have to state specifically the persons and real or personal property to which it applied. If a permit holder requested modification of a permit, or if the Director determined that modifications were necessary, the Director could invoke permit modifications which the Director considered necessary. The Director could prescribe a fee not to exceed $500 for administrative costs associated with the processing of a modification of a permit.

Generator: Waste Manifest

A generator who was issued a permit under the bill or who had equivalent privileges in this State would be required to do all of the following:

- Prepare a manifest for each shipment of waste.
- Provide a separate manifest for each unit of waste (as determined by the Department) that was to be transported to or collected or processed on property other than the property to which the generator's permit applied.
- Include with each manifest details as specified by the Department, including sufficient qualitative and quantitative analysis and physical description of the waste to permit an evaluation of the potential hazards associated with the waste and to determine proper methods of transportation, processing, collecting, storage, and disposal. The manifest also would have to indicate any safety or transportation requirements required by law for each shipment of waste.
- Within 10 days after the transfer of the waste to a carrier, processor, or collector, or to the disposal site, submit a copy of the manifest to the Authority.
- Compile and maintain information and records regarding the quantities and the disposition of waste shipped.
- Package waste in accordance with applicable Federal requirements, this bill, or Senate Bill 297.
- Label each container of waste with the generator's identification number and an identification number that corresponded to the number listed on the manifest for that waste; and, comply with all lawful requirements for labeling and containerization of waste for shipment.
- Keep all records and copies of manifests available for review and inspection at reasonable times by the Department or a peace officer.
- Retain all records and manifest copies for three years.
- Certify that the information contained in each manifest was accurate.
- Provide for the transport, collection, or processing of waste only by persons holding a carrier's, collector's, or processor's permit or who had equivalent privileges in this State under the bill.

Without obtaining an additional permit, a person who held a generator's permit issued in this State could act as a carrier, collector, or processor in regard to waste that was generated by the holder, and would be subject to the same requirements for a carrier, collector, or a processor.

Carrier Permit: Additional Requirements

As a condition of obtaining a carrier's permit from this State, each vehicle used by a carrier to transport waste would have to be registered by the Department of State Police annually. The Department of State Police would be required to supply the carrier with a vehicle tag for each vehicle registered. The vehicle tag would have to be displayed by the carrier on each registered vehicle. In addition, the Department of State Police would have to inspect the vehicles of the carrier used to transport waste to insure compliance with applicable State and Federal law, and would be allowed to collect a fee of $200 for each vehicle that was inspected.

The Department would be required to specify the routes available in this State for the transportation of waste. A carrier would not be permitted to transport waste unless each shipment of waste were accompanied by a manifest. A carrier would have to certify on the manifest the receipt of waste for transportation, and specify the number of containers of waste received and actually delivered, and the corresponding identification numbers for each container of waste, and the carrier's identification number. The carrier would be required to deliver the waste and the manifest only to the destination specified on the manifest. A carrier would have to retain a copy of each manifest for three years. The carrier would have to forward a copy of the manifest to the Authority within 10 days of its delivery to a processor or collector, or to the disposal site.

Collector's Permit: Manifest

A collector would not be permitted to accept the delivery of waste unless the waste was accompanied by a manifest. A collector would have to certify on the manifest the receipt of waste and specify the number of containers of waste

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received and actually delivered, and the corresponding identification numbers for each container of waste, and the collector's identification number. The collector would be required to transfer the manifest with the waste to a carrier for transportation. A collector would have to retain a copy of each manifest for three years. The collector would also have to forward a copy of the manifest to the Authority within 10 days of transferring the waste to a carrier for transportation.

Processor's Permit: Additional Requirements

A processor would not be permitted to accept the delivery of waste unless the waste were accompanied by a manifest. A processor would have to certify on the manifest the receipt of waste, the amount, and the type of waste received for processing, and would have to include on the manifest the processor's identification number. A processor could only provide for the transportation of waste by a person who held a carrier's permit. A processor would have to forward a copy of the certified manifest to the generator within 10 days of receiving the waste. The processor would have to retain a copy of each manifest for three years. A processor also would have to prepare a manifest for each shipment of waste it transferred to a person who held a carrier's permit.

A processor would be required to maintain any records necessary to trace a generator's shipment from the point of receipt by the processor to the point of transfer to a carrier. A processor would have to package waste in accordance with applicable Federal requirements, the bill, and Senate Bill 297. If a processor placed waste in a different container than the container in which the generator placed that waste, the processor would have to label each new container of waste with the following:

- The generator's identification number.
- An identification number that corresponded to the number listed on the manifest by the generator for that waste.
- The processor's identification number.
- The identification number listed on the manifest by the processor for that repackaged waste.

Other Requirements

A person could not possess waste in the State without complying with the manifest requirements of the bill, and data obtained from any person on a required manifest would be public information. A generator, carrier, processor, and a collector who held a permit issued under this part or who held a permit in a state that had been granted equivalent privileges would, by utilizing the disposal site in this State, be considered to have given implied consent to the duties and responsibilities imposed on that person under the bill and Senate Bill 297.

A generator, carrier, processor, and collector who held a permit issued under the bill would be required to post a surety bond in an amount determined by the Department. The bond would have to be payable to the Department and conditioned upon performance in accordance with the terms and conditions of the permit of the generator, carrier, processor, or collector. If a person violated the provisions of the bill, any rules promulgated under the bill or any terms or conditions of a permit issued, the Department would have to be reimbursed for all costs that were incurred as a result of the violation.

Release of Waste

A generator, carrier, processor, and collector would be responsible for giving immediate oral notice to the Department, the local monitoring committee of the host site community, and the Authority regarding any known release of waste in the State. Within 10 days after the release, a written report would have to be submitted by the generator, carrier, processor, or collector to the Department, the local monitoring committee, and the Authority, and would have to include all of the following information:

- The date, time, and location of the release.
- The cause, nature and details of the release.
- The remedial actions, if any, taken to effectuate corrective measures and to mitigate the impact of the release.
- The measures to be taken to prevent the occurrence of future releases.
- Other information that could be required by the Department.

DPH Regulatory Actions

A person who held a license or permit issued under the bill could be subject to sanctions for negligence or a failure to exercise due care, including negligent supervision, regarding the license or permit holder's contractors, employees, agents, or subordinates. The Department could suspend, revoke, annul, withdraw, recall, or cancel a license or permit in accordance with the Administrative Procedures Act if any of the following existed:

- Fraud or deceit in obtaining a permit or license or in registering under this part.
- A violation of the bill, an order issued, or a rule promulgated under the bill, or the conditions of a registration, permit, or license.
- Negligence or failure to exercise due care, including negligent supervision, regarding contractors, employees, agents, or subordinates.

In addition to, or in lieu of any of the above authorized actions, the Department could issue an order directing the person to do either of the following:

- Discontinue handling or otherwise possessing waste.
- Comply with specific requirements of a permit or license.

The Department could establish procedures, hold hearings, administer oaths, issue subpoenas, and order testimony to be taken at a hearing or by deposition in a proceeding. A person could be compelled to appear and testify and to produce books, papers, or documents in a proceeding. In the case of disobedience of a subpoena, a party to a hearing could invoke the aid of the circuit court of the county in which the hearing was held to issue an order requiring an individual to appear and give testimony.

An application for a license or permit could be denied on a finding of any condition or practice that would constitute a violation of the bill, or if there were fraud or deceit in attempting to obtain a permit or license.

Inspections

The Director or his or her authorized representatives could enter the disposal site or other location where waste was located or reasonably believed to be located at any time for the purpose of monitoring, surveillance, and inspection. The Director also could enter at all reasonable times upon any public or private property, building, premises, place, or vehicle for the purpose of determining compliance with the bill, or a permit, registration, or license condition, rule, or order. In the conduct of an investigation, the Director or his or her authorized representatives could collect samples, conduct tests and inspections, and examine any book, record, paper, document, or other physical evidence related to the generation, management, processing, collecting, transport, storage, or disposal of waste.

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The Department would be required to conduct unannounced spot checks of the premises of generators and processors who held permits to assure the proper packaging of waste. The unannounced spot checks could occur only to the extent that the Department had access to the premises of the generator and processor under Federal law. The Department would have to advise the Authority of regulatory actions taken. The Department would also have to evaluate and respond within 30 days to information received from the Authority in which the Authority recommended that regulatory action should be undertaken.

An agent or employee of the Department could apply for an administrative inspection warrant, or for a search warrant for purposes of collecting samples, testing, inspecting, or examining any radioactive material or any public or private property, building, premises, place, vehicle, book, record, paper, sample results, or other physical evidence related to the generation, processing, collecting, management, transport, storage, disposal, or possession of waste. It would be sufficient probable cause to show any of the following:

- The sample collection, test, inspection, or examination was pursuant to a general administrative action to determine compliance with the bill.
- An agent or employee of the Department had reason to believe that a violation of the bill had occurred or could occur.
- An agent or employee of the Department had been refused access to the waste, or other physical evidence related to the generation, management, processing, collecting, transport, or disposal of waste, or had been prevented from collecting samples or conducting tests, surveillance, inspections, monitoring, or examinations.

Violations and Penalties

Notwithstanding the existence and pursuit of any remedy, the Director, without posting a bond, could request the Attorney General to bring an action in the name of the people of this State to restrain, enjoin, prevent, or correct a violation of the bill, rule, or a permit or license. The Department could promulgate rules to adopt a schedule of civil fines to enforce the bill. If the Director found that a person was in violation, the Director could issue an order requiring the person to comply with the bill, rule, permit, or license. An order could require remedial actions considered necessary by the Department to correct violations. An order issued by the Director could be an emergency order upon a finding and determination that an imminent danger to the health or lives of individuals existed. The Attorney General could commence a civil action against a person for appropriate relief, including injunctive relief for a violation of the bill or a rule. An action could be brought in the Circuit Court for the County of Ingham or for the county in which the defendant was located, resided, or was doing business. In addition, the court could impose a civil fine of not more than $25,000 for each violation and, if the violation were continuous, for each day of continued noncompliance. A fine collected under the bill would have to be forwarded to the State Treasurer for deposit in the General Fund.

A person who possessed, generated, processed, collected, transported, or disposed of waste in violation of the bill, or contrary to a license, permit, order, or rule, or who made a false statement, representation, or certification in an application for, or form pertaining to, a permit or license, would be guilty of a misdemeanor. It would be punishable by a fine of not more than $25,000 for each violation and, if the violation were continuous, for each day of the violation, or imprisonment for not more than one year, or both. If the conviction were for a violation committed after a first conviction, the person would be guilty of a misdemeanor, punishable by a fine of not more than $50,000 for each violation and each day of a continuous violation, or by imprisonment for not more than five years, or both. In addition, any person who committed the violation and knew at that time that he or she thereby placed another person in imminent danger of death or serious bodily injury, and if his or her conduct in the circumstances showed an unjustified and inexcusable disregard or indifference for human life, would be guilty of a misdemeanor. It would be punishable by a fine of not more than $250,000 or imprisonment for not more than two years, or both. Any person whose actions constituted an extreme indifference for human life would, upon conviction, be subject to a fine of not more than $250,000 or imprisonment for not more than five years, or both. A defendant that was not an individual and not a governmental entity would be subject, upon conviction, to a fine of not more than $1,000,000. For the purposes of this violation, a person's state of mind would be knowing with respect to:

- His or her conduct, if he or she were aware of the nature of his or her conduct.
- An existing circumstance, if he or she were aware or believed that the circumstance existed.
- A result of his or her conduct, if he or she were aware or believed that his or her conduct was substantially certain to cause danger of death or serious bodily injury.

In determining whether a defendant who was an individual knew that his or her conduct placed another person in imminent danger of death or serious bodily injury, both of the following would apply:

- The person was responsible only for actual awareness or actual belief that he or she possessed.
- Knowledge possessed by a person other than the defendant but not by the defendant himself or herself could not be attributed to the defendant. In proving the defendant's possession of actual knowledge, however, circumstantial evidence could be used, including evidence that the defendant took affirmative steps to shield himself or herself from relevant information.

It would be an affirmative defense to a prosecution under the bill that the conduct charged was consented to by the person endangered and that the danger and conduct charged were reasonably foreseeable hazards of either of the following:

- An occupation, business, or profession, or through the undertaking of an inspection of the disposal site as a representative of the local monitoring committee of the host site community.
- Medical treatment or professionally approved methods the risk of which the person had been made aware prior to giving consent to the treatment or method.

The defendant could establish an affirmative defense by a preponderance of the evidence. Under the bill, "serious bodily injury" would mean each of the following:

- Bodily injury which involved a substantial risk of death.
- Unconsciousness.
- Extreme physical pain.
- Protracted and obvious disfigurement.
- Protracted loss or impairment of the function of a bodily member, organ, or mental facility.

In addition to a fine, the Attorney General could bring an action to recover the full value of the damage done to the

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natural resources of the State and the costs of surveillance and enforcement by the State resulting from the violation. The damages and costs collected would have to be forwarded to the State Treasurer for deposit in the General Fund.

The court, in issuing a final order in an action brought under the bill, could award costs of litigation, including reasonable attorney and expert witness fees to a party, including the State, if the court determined that the award was appropriate.

A person who had an interest which was or could be affected by a civil or administrative action commenced under the bill would have a right to intervene in that action.

Action Against the Director

A person could bring an action for an injunction against the Director to compel the Director to fulfill a requirement of the bill. However, the failure of the Department to comply with a requirement of this part that pertained to specified dates by which certain acts were to occur would not invalidate an action taken by the Department after the specified date if that action were otherwise in compliance with this part.

Funding

The Department would have to deposit all receipts from civil fines and fees collected pursuant to the bill and from judgments, settlements, and other payments collected in the General Fund of the State Treasury.

Funds credited to the General Fund would have to be appropriated for the purposes provided in the bill, and if insufficient funds were available or appropriated from the General Fund, the Department could seek appropriations by the Legislature from the Low Level Radioactive Waste Management Fund. Funds would be used for purposes including, but not limited to, any of the following:

- Hiring personnel and any other operating and contingent expenses necessary for the proper administration of the bill, to fulfill the State's obligations under the Low Level Radioactive Waste Policy Act, and to assure adequate involvement by the State in Commission and Compact activities and responsibilities.
- Regulatory costs, including, but not limited to, the costs of promulgating and enforcing administrative rules if the State entered into an agreement with the United States Nuclear Regulatory Commission as provided in the bill.
- Contracting with any person or vendor.
- Taking any actions necessary to protect the public health, safety, and welfare, and the environment from actual or threatened harm.

Other Provisions

The bill specifies that it could not be construed to limit the financial responsibilities of a person who held a permit or license under the bill, or establish or imply any liability on the part of the State.

If expenditures were required as a result of a release or threatened release, the Department, the Attorney General on behalf of the Department, the Department of Natural Resources, and the Authority, would have to seek to obtain funds from a responsible party including a surety bond or other instrument, mechanism, fund, or liability insurance.

A municipality or county could not prohibit or restrict a lawful activity regulated under this part.

Proposed MCL 333.13701 - 333.13741

Senate Bill 66

The bill would amend Public Act 113 of 1978 (which regulates the deposit and storage of radioactive waste) to create a new exemption to the State's ban on depositing or storing radioactive waste. The exemption would apply to low-level radioactive waste that was disposed of in accordance with both Public Act 460 of 1982 (the Act providing for Michigan's participation in the Midwest Interstate Low Level Radioactive Waste Compact) and Senate Bill 65.

MCL 325.491

Senate Bill 297 (S-2)

The Low Level Radioactive Waste Authority

The Low Level Radioactive Waste Authority would be created as an autonomous entity within the Department of Management and Budget. A Commissioner for the Authority would be appointed by the Governor, with the approval of the Senate, and would serve a two-year term at the pleasure of the Governor. The Commissioner would receive a salary paid from the Low Level Radioactive Waste Management Fund as proposed in Senate Bill 65. The Commissioner would be exempt from Civil Service and would be directly responsible to the Governor. The Commissioner would be required to employ personnel as necessary to implement the bill. The Authority would be authorized to do the following:

- Hold public meetings in compliance with the Open Meeting Act.
- Accept assistance from public agencies, colleges and universities, private foundations, individuals, corporations, or associations.
- Accept and use a donation, loan, grant, or reimbursement of funds to obtain equipment, supplies, materials, or services from any state or the United States or an agency or a political subdivision of a state or the Untied States or from the Midwest Low Level Radioactive Waste Commission, or from any person. The information concerning the acceptance of funds would have to be made public and no donor, lender, or grantor could derive any advantage from such a transaction. Funds obtained would have to be deposited in the Low Level Radioactive Waste Management Fund as proposed in Senate Bill 65.
- Form advisory committees as considered appropriate.
- Exercise the power of eminent domain.
- Perform other functions considered necessary to implement the bill.
- Establish a computer system to maintain, receive, or transmit any of the following: a manifest, report or other record required by the bill or Senate Bill 65; a disposal shipment certificate; the application for a construction and operating license for the disposal site; and information the Authority would be required to provide the public under the bill.
- Issue bonds as provided by law.

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

- Select the host site.
- Submit an application to the DPH for a construction and operating license for the disposal site that would meet the requirements of Senate Bill 65.
- Acquire, purchase, hold, lease or manage real property, easements, and rights-of-way to implement this proposed Act.
- Make available and negotiate on behalf of the State, incentives and benefits for the State, host site community, and municipalities and counties that had a common border with the host site community.

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- Make available to local monitoring committees sufficient funding to enable them to fulfill their responsibilities.
- Establish just and reasonable waste disposal fees and surcharges.
- Negotiate funding with the Midwest Low Level Radioactive Waste Compact Commission.
- Serve through the representation of the Commissioner of the Authority as the voting member representing the State on the Midwest Low Level Radioactive Waste Compact Commission.
- Direct the efforts of the State to comply with its lawful responsibilities under the Compact.
- Establish and implement a disposal shipment registration system.
- Make a continuous study and investigation of the disposal site in order to ascertain and provide remedies for any defects.
- Refuse to accept waste for disposal in the disposal site that was generated in a state not a member of the Compact except upon a vote of the Commission as required in the Compact, a Compact member who was delinquent in paying dues or fees, and a Compact member who failed to maintain or establish a permitting and regulatory system.
- If the State withdrew from the Compact and did not enter another, refuse to accept waste not generated in the State.
- Refuse to accept waste at the disposal site after December 31, 2013.
- Inspect the construction of the disposal site on a weekly basis and submit the results to the Department of Public Health.

The Authority also would be required to do all of the following or enter into contracts to assure that all of the following were accomplished:

- Site characterization.
- Performance assessment.
- Development of siting criteria.
- Disposal site monitoring.
- Disposal site design, construction, and engineering and inspection.
- Selection of disposal technology.
- Prepare an application for construction and operating license for the disposal site.
- Site closure and stabilization.
- Postclosure observation and maintenance.
- Institutional control.

No later than January 1, 1990, the Authority would have to submit an application to the DPH for a construction and operating license pursuant to the requirements of Senate Bill 65. If the State became a full agreement state by January 1, 1990, the Authority would also be required to apply to the Nuclear Regulatory Commission for a construction and operating license by that date.

If the Authority elected to enter into agreements or contracts with a person to perform a responsibility of the Authority, the Authority would have to do all of the following:

- Establish minimum qualifications for the person.
- Establish the responsibilities of the person and specify the responsibilities that the Authority retained.
- Determine whether the person should be required to obtain a surety bond or other suitable instrument or mechanism or a secured trust fund.
- Comply with all the requirements of Senate Bill 65.
- Forward a copy of each contract to the DPH.

If the Authority elected to enter into an agreement or contract to prepare a construction and operating license, it would have to provide public notice and an opportunity for public comment on the minimum qualifications required of the person.

Municipalities Volunteering to be the Host Site

Within 60 days of the effective date of the bill, the Authority would have to establish a process by which a municipality could volunteer to be the host site. The process would have to require that in order for a municipality to be considered, a majority vote of the governing body of the municipality requested such consideration. If the Authority received notice of a municipality volunteering as a host site community, the Authority would have to provide to the municipality both of the following:

- Information about the siting process, and laws pertaining to the generation, transportation, storage, collection, processing, and disposal of low level radioactive waste.
- Specific criteria and information the Authority would have to consider with regard to candidate site and host site selection.

If the Authority received notice of a municipality volunteering as a host site community, the Authority could also do one or both of the following for the municipality:

- Provide funding to cover the expense of preparing data for submission to the Authority.
- Provide other services or information considered appropriate by the Authority.

Siting Advisory Committee

Within 30 days of the effective date of the bill, the Authority could organize the establishment of a siting advisory committee. If such a committee were organized, it would have to be formulated as an independent entity within the Department of Management and Budget. The committee would consist of five members, appointed for a term to be determined by the Authority, who would each have to be employed by a university or college in the State and be knowledgeable in a technical specialty related to the siting of a low level radioactive waste site. The committee could do any or all of the following:

- Recommend to the Authority proposed siting criteria.
- Review existing and proposed Federal and State laws and rules pertaining to site criteria.
- Review technical information and make recommendations.
- Attend public hearings.
- Assist the Authority in drafting responses to comments regarding the final siting criteria adopted by the Authority.
- Fulfill its responsibilities in accordance with target dates established by the Authority.

A majority of the committee members would constitute a quorum and action by the committee would be by a majority of votes cast. The Department of Management and Budget would have to provide staff and services to the committee and upon request, the Departments of Natural Resources, Attorney General, Management and Budget, State Police, and Public Health also would provide assistance. The committee would have to meet at least once a month and comply with the Open Meetings Act. Members would not receive compensation for their services, but would be reimbursed for expenses that were incurred in the performance of duties as a member of the committee.

Siting Criteria

The Authority would be required to establish final siting criteria no later than March 15, 1988. In establishing final

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siting criteria, the Authority would have to review and consider the proposed criteria that could be presented by a siting criteria committee. Thirty days before establishing final siting criteria, the Authority would have to prepare a draft version and make it available for public comment. During the 30-day period, the Authority could hold a public meeting.

The Authority would have to establish a final siting criteria that at a minimum excluded a candidate site that is any of the following:

- Located in a 500 year flood plain.
- Located over a sole source aquifer.
- Located one mile or less from a fault where tectonic movement (structural deformation of the earth's crust) had occurred within the 10,000 years preceding the effective date of the bill.
- Not large enough to assure that an isolation distance of 3,000 feet or more was available to adjacent property lines.
- Had wetlands within the boundaries of the site as defined in the Wetland Protection Act.
- An environmental area or a high risk area as defined in the Shorelands Protection and Management Act.
- A floodway as designated under Public Act 245 of 1929 (which governs the Water Resources Commission).
- Located where the hydrogeology beneath the site discharges groundwater to the land surface within 3,000 feet of the boundaries of the candidate site.
- Located within 10 miles of Lake Michigan, Superior, Huron, Erie, or their connecting waterways.

Not later than June 1, 1988, the Authority would have to designate three qualified candidate sites, and exclude any candidate that was not all of the following:

- Located where there is not less than six meters of soil with a maximum permeability of 1.0 times 10 to the minus 6 cm/sec at all points below and lateral to the bottom most portions of the leak detection system of the disposal unit or an area that provides equivalent environmental protection to the public, health, safety and welfare, and the environment.
- Free of ponding or capable of being drained in a manner that insured the integrity of the disposal unit.
- Providing a stable foundation for engineered containment structures.
- Located where the groundwater travel time along any 100-foot flow path from the edge of the disposal unit is less than approximately 100 years.
- Located where the unconfined water table which is not the potentiometric surface, is sufficiently low to prevent the intrusion of groundwater into areas in which waste would be disposed, except as outlined under the Federal rules governing technical requirements for land disposal facilities (10 CFR 61.50-a7).
- Located in an area that is not above an aquifer that is the primary source of water for a municipality or county or for persons residing or doing business in the municipality or county where a candidate site would be located.

In designating three candidate sites, the Authority also would have to give preference to sites that are all of the following:

- Suitable to insure the isolation of the waste and other site features that would assure compliance with the long-term performance objectives of the Federal rules that regulate licensing requirements for land disposal of radioactive waste (10 CFR 61.40-61.44).
- Well drained and free of areas of flooding.
- Able to be characterized, modeled, analyzed, and monitored.
- Located where natural resources do not exist that, if exploited, would result in failure to meet the performance objectives under Federal regulations.
- Located where projected population growth and future developments within the municipality or county where the site was to be located were not likely to affect the ability of the disposal facility to meet Federal performance objectives or could not significantly mask an environmental monitoring program.
- Located consistently with the requirements of Federal laws including the Atomic Energy Act, Federal Water Pollution Control Act, Coastal Zone Management Act, Endangered Species Act, Wild and Scenic rivers Act, Wilderness Act, National Wildlife Refuge System Administration Act, the Federal law that provides for national historic sites (16 USC 461-467), and the National Historic Preservation Act.
- Located where geologic processes such as mass wasting, erosion, slumping, landsliding, or weathering do not occur to the extent that the ability of the disposal site to meet Federal performance objectives would be significantly affected or could preclude defensible modeling and prediction of the long-term impact of such occurrences.
- Located so that the upstream drainage area is minimized to decrease runoff that could erode or inundate waste placed in the disposal unit.

The Authority could waive one or more of the criteria that it was required to give preference to if the Authority obtained written approval from the Department. The criteria could be waived if the Director determined that the waiver would not compromise the public health, safety, or welfare, or the environment, and that a site would be an appropriate candidate despite the site's inability to meet one or more of the criteria. The Authority would have to provide public notice of a proposed waiver and an opportunity for public comment.

Disposal Site Characterization

Immediately after the designation of the candidate sites, the Authority, after consultation with the Departments of Public Health and Natural Resources, would have to begin a site characterization at each candidate site. The site characterization would have to establish a comprehensive baseline environmental monitoring program at each site. The program would have to provide, to the extent feasible, for the participation of the local monitoring committee and the training of committee members to facilitate their participation. The program would have to establish baseline environmental data for at least one year and do the following:

- Determine compliance with requirements of a construction permit or operating license issued by the Department of Public Health.
- Provide early warning of the magnitude and extent of any release [of radioactivity].
- Provide environmental data throughout the construction, operation, site closure and stabilization, postclosure observation and maintenance, and institutional control of a disposal site.
- Collect and analyze data concerning standing and running surface water and drainage; groundwater samples from off-site, site boundary, and waste management area wells; soil and radiological measurements off-site, at the site boundary, and in the waste disposal unit. The local monitoring committee would be entitled to obtain portions of the samples for analysis by a competent independent laboratory.

The Authority would have to have access to each candidate site for conducting site characterization and other

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responsibilities under the bill. The site characterization on each of the candidate sites would have to begin no later than July 1, 1988, and be completed no later than July 1, 1989.

Candidate Site Review Board

Not more than 90 days after the designation of the candidate sites, but not later than September 1, 1988, a review board would have to be established to provide recommendations to mitigate concerns of the municipality in which each candidate site was located, if the recommended provision had been included in the construction permit for the disposal site or in the conditions for operating a disposal site, or both, if the municipality were selected as the host site. The review board would have to hold public hearings, and make recommendations to the Authority no later than 30 days after 12 months of site designation was available. The review board could recommend to the Authority one of the three candidates as host site. The board would consist of seven voting members and one nonvoting chairperson as follows:

- One member, representing local governments at large, to be appointed by the Governor and approved by the Senate.
- Three members consisting of the Directors of the Departments of Public Health, Natural Resources, and State Police.
- Three members representing the municipalities where the three candidate sites were located. Each municipality would appoint, by its governing body, one member to serve.

The Governor, with the approval of the Senate, would have to appoint an attorney with experience in conducting public meetings as the nonvoting chairperson.

Four of the seven voting members would constitute a quorum and concurrence of four members would constitute a legal action of the board. Meetings would have to be held in accordance with the Open Meetings Act.

Local Monitoring Committee

Within 30 days of the designation by the Authority of the candidate sites, the governing body of those municipalities would have to establish a local monitoring committee to represent the interests of their citizens and to assure the protection of the public health, safety, and welfare and the protection of their local environment. Each committee could do all of the following:

- Represent the interests of the municipality regarding the selection of the disposal site.
- Independently review site characterization data.
- Prepare for the possible designation of the candidate site as the host site.
- Seek funding from the Authority to fulfill the responsibilities of the local monitoring committee.
- Provide for independent technical assistance to fulfill the responsibilities of the local monitoring committee.
- Present recommendations to the Authority and the review board regarding provisions and stipulations that would mitigate the concerns of the municipality that was represented by the local monitoring committee if it were selected as host site.

The committees for the municipalities that were not selected as the host site would be disbanded upon notification of the municipality that was selected.

The local monitoring committee of the host site, or its successor, would be required to continue in existence through the period of institutional control. The committee for the host site could do all of the following:

- Conduct an independent evaluation of the Authority's application for a construction permit and an applicant's application for an operating license.
- Provide for a committee representative or a technical advisor, or both, to inspect and monitor the construction of the disposal site and the completed disposal site with due regard to the safety of the representative and the technical advisor.
- Engage in any other activities that would be mutually agreed upon between the committee, DPH, or both.
- Engage in negotiation and enter arbitration with the Authority on various matters.

Host Site Designation

The Authority would be required to designate the host site by September 1, 1989. The Authority would have to assure that the disposal site was completed and operational by January 1, 1993, and in accordance with the criteria established in Senate Bill 65.

Local Monitoring Committee/Authority Negotiations

The local monitoring committee for the host site could negotiate with the Authority regarding any of the following:

- Monetary and nonmonetary forms of compensation.
- Matters pertaining to disposal site access and transportation issues that resulted from the siting of a disposal site.
- Landscape and appearance of the disposal site.
- Technical assistance available.
- Matters pertaining to host site community utility and natural resource utilization.

Negotiations could commence no later than 30 days after the host site designation. Negotiations would have to conclude no later than February 1, 1990. If negotiations were conducted, a final, signed report summarizing the agreements reached would have to be made public.

If the local monitoring committee and the Authority could not resolve an issue during negotiation, each side would have to prepare a final summary of each issue on which there was disagreement. The summary would have to include a statement from each party that explained and documented its final best offer on each issue in disagreement.

Arbitration Committee

The local monitoring committee or the Authority could require the appointment of an arbitration committee, if required, prior to February 1, 1990. The arbitration committee would have to consist of three members, and consist of a representative designated by the monitoring committee, sa representative designated by the Authority, and a chairperson who would have to be a member of the American Arbitration Association who would be jointly selected by the monitoring committee and the Authority. If a chairperson could not be agreed upon within seven days, the Director of the Department of Management and Budget could be requested to appoint a chairperson. All issues that were resolved during arbitration would have to be incorporated in a written final agreement, signed by each member of the arbitration committee, and be considered a public comment.

If one or more issues were not resolved within 45 days of the commencement of arbitration, but not later than April 1, 1990, arbitration would have to cease and each unresolved issue would have to be decided by the chairperson. The chairperson would have to choose between the final best offer of either side to resolve an issue. The chairperson's decision would be final ,and

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binding and would be incorporated into a final arbitration report to be issued within 30 days of the date on which the arbitration had ceased. The chairperson also would have to submit to the Authority a statement of his or her costs, to be paid by the Authority.

International Low Level Radioactive Waste Research Education Institute

No later than October 1, 1988, the Authority would be required to organize the establishment of an international Low Level Radioactive Waste Research Education Institute and hire an Executive Director and staff to operate the Institute. The Institute would be formulated as an independent entity within a State university or college designated by the Authority. The Institute would be composed of seven members jointly selected and appointed by the Authority and the chairperson of the Midwest Interstate Low Level Radioactive Waste Commission. The members would be as follows:

- One from a major industry that generated low level radioactive waste.
- One from a small business that generated low level radioactive waste.
- One from an environmental organization.
- Two from a college or university in the State that had expertise in low level radioactive waste reduction and neutralization technology.
- One from business or industry that had knowledge and experience in low level radioactive waste reduction and neutralization technology.

The Institute would have to do all of the following:

- Hire sufficient staff to fulfill its responsibilities.
- Utilize the membership, staff, and resources of the Institute or contract with other persons to conduct research into the development of low level radioactive waste reduction or neutralization technologies, or both.
- Explore opportunities to secure Federal grants.
- Investigate and make recommendations to the Authority and the DPH regarding new technologies, development, and research pertaining to the secure storage and disposal of low level radioactive waste and of the site closure, stabilization, postclosure observation, maintenance, and institutional control of the disposal site.
- Advise and assist the public in understanding issues surrounding low level radioactive waste.

Institute members would serve for terms of four years; of the members first appointed, however, two would serve two years, two would serve three years, and three would serve four years. A majority of the members would constitute a quorum for a meeting, which would have to be held in compliance with the Open Meetings Act. The Institute would have an annual budget of not more than $1.0 million, with funding to be paid from the Low Level Radioactive Waste Management Fund. A member of the Institute would receive compensation for his or her service and would be reimbursed for expenses. The Institute would have to meet within 30 days of formation, and at least quarterly thereafter.

Monthly Reports

The Authority would have to prepare and submit a monthly report to the DPH concerning all of the following:

- The character, volume, class, and curie count of waste received by the Authority.
- The number of manifests and shipments of waste received by the Authority.
- The number of manifests received by the Authority that properly and improperly reflected the waste received.
- The response of the Authority to any discrepancies in the manifest.
- The recommendation of the Authority to the DPH for follow-up action regarding a discrepancy in a manifest or other impropriety.

The Authority would have to submit to the DPH recommendations regarding sanctions against a generator, carrier, collector, or processor who was suspected of violation of a provision of Senate Bill 65.

Waste Disposal Fees and Surcharges

The Authority would be required to establish "just and reasonable" waste disposal fees and surcharges, and to assure that sufficient funds would be available in the Low Level Radioactive Waste Fund for all of the following:

- The disposal site, including the acquisition of the site.
- The Midwest Interstate Low Level Radioactive Waste Commission.
- The Authority, and all expenses incurred in meeting the requirements of Senate Bill 65.
- The budget of the DPH as it pertained to its regulatory responsibility outlined in Senate Bill 65.
- Site closure and stabilization.
- Postclosure monitoring and maintenance.
- Institutional control.
- The International Low Level Radioactive Waste Research and Education Institute.
- A siting criteria advisory committee.
- Compact member states that incurred expenses to obtain privileges in this State to enable waste generated to be disposed of in the disposal site.
- Reimbursing a department or agency or any person who assisted the Authority in fulfilling its responsibilities and duties.
- Effective implementation of the bill.
- Incentives available to candidate sites and the host site pursuant to agreements reached by the Commission and the Authority.

The waste disposal fees and surcharges of the disposal site would have to be based on all of the following:

- Volume and total radioactivity of waste, measured in curies. Fees would be proportionately higher for waste with a higher level of radioactivity.
- A fee schedule that was not dependent on revenues received for disposal of class "C" waste.
- A realistic model of the projected cost of the disposal of each classification of waste.
- The imposition of a 20% surcharge to be added to the negotiated fees. The surcharge would have to be distributed by the Authority as follows:
  - 5% to the host site.
  - 3% to a municipality adjacent to a host site.
  - 2% to the county in which the site was located and each county that shared a boundary with the disposal site.
  - 3% to the Environmental Response Fund.
  - 2% to the Clean Michigan Fund.
  - 5% to the Low Level Radioactive Waste Management Fund for the postclosure monitoring and maintenance of the site.

The Authority would have to enter into an agreement with the Commission to assure that bonding requirements of Senate Bill 65 would be fulfilled. The Authority could also impose a "just and reasonable" surcharge on a generator,

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carrier, processor, or collector who did not comply with the provisions of Senate Bill 65.

Low Level Radioactive Waste Management Fund

A Low Level Radioactive Waste Management Fund would be created in the State Treasury and administered by the Authority. The Legislature would have to make appropriations from the Fund as provided in Senate Bill 65, and as would be necessary for the Authority to implement fully its powers and responsibilities. The source of the fund would have to include revenue from the following sources:

- Funds provided by the Commission.
- Rebates received by the Commission from the Department of Energy.
- Funds received in the form of a donation, loan, or grant from various sources.
- Disposal fees and surcharges established by the Authority under the bill.

The assets of the Fund would be tax exempt, would have to be preserved, invested, and expended solely for the purposes of the bill, and could not be transferred or used by the State for any other purpose.

Other Provisions

No later than April 1, 1988, the Authority would have to submit a report to the Governor and the Legislature that included recommendations regarding the relationship of the State to the Midwest Interstate Low Level Radioactive Waste Compact, to assure the following:

- The continuity in Compact membership and the institutional and financial stability of the Compact.
- The institutional and financial stability of the Authority
- The financial stability of all aspects of the disposal site.
- The equal sharing by all Compact members of all liabilities and costs associated with the disposal site.

The report would also have to include recommendations regarding any amendments that could be required to the bill, Senate Bill 65, or any other rule or law and whether the State should include naturally occurring or accelerator produced radioactive materials known as N.A.R.M. waste in the definition of waste that could be disposed of in the disposal site.

The failure of the Authority to comply with a requirement of the bill that pertained to specific dates would not invalidate an action taken by the Authority after the specified date, if the action were otherwise in compliance with the bill. The Authority would have to make an annual report to the Governor and the Legislature that gave a full account of its activities. Upon request of the Authority, any department or agency in the State would have to assist the Authority in fulfilling its responsibilities under the bill and would have to be reimbursed for costs associated with the assistance.

The Legislature would be required annually to appropriate to the Authority sufficient funding from the Low Level Radioactive Waste Management Fund to ensure the effective implementation of the bill.

FISCAL IMPACT

Senate Bill 65 (S-2)

The costs associated with Senate Bill 65 are indeterminate due to lack of experience to date in regulating low-level radioactive waste disposal facilities and the uncertainty of the degree to which the State will assume regulatory responsibility from the Federal Nuclear Regulatory Commission (NRC). In the event the State assumes all regulatory responsibility from the NRC, the costs of Senate Bill 65 would include the cost of regulating the approximately 650 former NRC licensees ($600,000-$700,000 annually), licensing disposal facility construction and operation ($350,000-$400,000 total), environmental monitoring ($50,000-$100,000 annually), and program administration, enforcement, and long-term monitoring (indeterminate).

The above costs would be supported through generator, processor, carrier, and collector licensure fee revenues (approximately $325,000-$350,000 every three years), facility construction and operation licensure fee revenues (to cover costs), and radioactive waste generator fees.

Senate Bill 66

The bill would have no fiscal impact on State or local government.

Senate Bill 297 (S-2)

Because of a relative lack of experience to date, in siting, constructing, and operating a low level radioactive waste disposal facility, the total cost to the State of the activities that would be mandated in Senate Bill 297 cannot be determined. Some estimate of expected costs can be made by reviewing the major cost components of such a project. These components include the following:

1. Capital (life of project)
   a. developmental.....$ 9-12 million
   b. construction.....$35-60 million
2. Facility Operation (annual).....$ 6-7 million
3. Facility Closure (100 years).....$35-65 million
4. Authority (annual)
   a. operations.....$675,000-$800,000 (current appropriation)
   b. data management.....$50,000-$100,000
5. International Low Level Radioactive Waste Research and Education Institute (annual).....Less than $1 million

The above costs should be primarily offset by fees received from low-level radioactive waste generators. Facility closure costs would be at least partially offset by 25% of a 20% surcharge on waste generator fees. At current disposal rates and fee levels this could amount to $250,000 to $350,000 annually.

The State's Environmental Response Fund (Public Act 307 of 1982) and Clean Michigan Fund (Public Act 249 of 1986) would receive additional revenues as a result of the 20% surcharge mandated in Senate Bill 297. These funds would receive 25% of the annual surcharge revenues, approximately $250,000 to $350,000 at current disposal rates and fees.

Local units of government would not experience any additional costs under the provisions of the bill. However, the community in which the disposal facility was located and surrounding communities would receive increased revenues from the 20% surcharge on waste generator fees ($500,000-$700,000 annually at current disposal rates and fee levels). In addition, these local communities could receive revenues through the Midwest Low Level Radioactive Waste Commission rebate incentive package and through potential increases in local tax revenues.

ARGUMENTS

Supporting Argument

In addition to requiring each regional compact to designate a host state for the region's low-level radioactive waste,

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the 1985 Low Level Radioactive Waste Policy Amendments Act also requires that a siting plan for the regional facility be in place prior to January 1, 1988. The Department of Energy has indicated that the siting plan must be in statutory form. Senate Bills 65, 66, and 297 would fulfill Federal mandates for the disposal of low-level radioactive waste, and prevent Federal punitive measures from being taken against the State. These measures could include the imposition of a significant surcharge increase on waste which is presently sent to Washington, South Carolina and Nevada; loss of Federal funds for site construction and analysis; and a great potential that Michigan hospitals, universities, research facilities, industry, and utilities would lose access to existing disposal facilities.

Supporting Argument

Currently, Michigan law prohibits the permanent disposal of low-level radioactive waste in the State. Senate Bill 66 would amend the Public Health Code to permit disposal of low-level radioactive waste, therefore allowing the process of siting and regulating a disposal site (as outlined in Senate Bills 65 and 297) to proceed legally.

Supporting Argument

The use of radioactive materials provides benefit to society in education, medicine, industry, research, and energy production. Low-level radioactive waste, which is a necessary by-product of these activities, can be disposed of safely and in an environmentally acceptable manner. Senate Bills 65, 66, and 297 would allow Michigan to progress toward a functioning low-level radioactive waste disposal site in 1993, as Federal law requires.

Opposing Argument

Unlike the disposal of household trash, radioactive wastes may not be shipped to a solid waste landfill. These wastes have unique characteristics that require special isolation systems to prevent the contamination of surrounding areas. The degree of isolation necessary is generally determined by classifying waste into two categories: high-level and low-level radioactive waste. While high-level waste is defined as having a higher concentration of radioactive isotopes and remains a Federal responsibility, Michigan is being asked to accept for disposal low-level waste. "Low-level waste" is an imprecise category covering a broad spectrum of radioactive materials. Although low-level waste is often associated with slightly contaminated booties, test tubes, and other refuse, it also includes highly radioactive materials from nuclear reactors. While some low-level waste may remain radioactive for only hours, other types stay hazardous virtually forever. For example, ion exchange resins and irradiated reactor components from the decommissioning of reactors are considered low-level, yet have hazardous lives in excess of 100,000 years. The states should not be forced to accept what should remain national responsibility: the disposal of all nuclear waste. The states are not adequately equipped to deal with the problem, and, rather than going along with ill-conceived Federal legislation, should refuse to set in motion the framework proposed by Senate Bills 65, 66, and 297, and should challenge the U.S. Congress to rethink and amend its laws that require states to assume disposal responsibility. In this vein, the Senate already has adopted Senate Resolution 259 and Senate Concurrent Resolution 314, memorializing Congress to review the Low Level Radioactive Waste Policy Act.

Response: Some people have assumed that refusing to comply with Federal deadlines regarding the establishment of a waste facility will simply cause the problem to go away. Low-level radioactive waste exists. Experts say there's little chance that the Federal law, arrived at after lengthy debate and negotiation, will be changed soon. Our task, therefore, is to manage low-level waste in the safest possible way for the people and the environment of the State of Michigan. The State generates a substantial volume of waste, about 60,000 cubic feet per year, primarily from nuclear reactors. This volume will increase substantially when Fermi II is fully operational. Whether or not Michigan remains a member of the Midwest Compact, Michigan is responsible for managing this waste. Through the many safeguards found in Senate Bills 65, 66, and 297, Michigan would not construct a waste facility until it was certain that we could protect the health of Michigan's citizens and the quality of Michigan's environment. The site would be continuously monitored and radioactive wastes would be recoverable in case of leakage or accident. The three bills have been developed in close consultation with the executive agencies, with environmentalists, and with users of radioactive materials, and would create the capacity for Michigan to meet its responsibilities to itself and those states with whom, in good faith, we have created a Compact.

Opposing Argument

The bills propose that Michigan be responsible for accepting radioactive waste for 20 years. Then, under the Midwest Compact, we would be followed by Ohio, who would collect the region's waste for the next 20 years. It is of concern that there exists no adequate safeguards to prevent a state from dropping out of the Compact prior to assuming its turn to receive the region's waste for disposal. In addition, the U.S. Congress will review the system of disposal every five years and could throw the whole regional arrangement. This would leave Michigan responsible for accepting radioactive waste for 20 years and safeguarding it for more than 400 years while the radioactivity dissipates. The plan for funding the disposal site is also a concern. The sites would be funded by corporations or governmental agencies using the site, but such revenues could not guaranteed to be forthcoming. Liability is another question that is not adequately addressed by the bills or the Compact. In case of radioactive leakage or another accident, Michigan would be responsible. The regional compact does not require the other states to share liability. No plans should be made to allow waste from other compact states to be disposed in Michigan unless those states commit themselves to staying in the Compact indefinitely, guarantee to pay the fees necessary to safeguard the public health and environment, and share legal liability.

Opposing Argument

Many experts maintain that the Federal plan for as many as 13 low-level disposal sites in the country requires three or four times as many as are needed. Since Federal law requiring such sites was passed, the Nation hasn't been producing the quantity of waste that was projected. With many fewer national sites needed, it would seem foolish to plan for a state like Michigan, which is surrounded by 20% of the earth's fresh water, to be a disposal site. If waste must be stored in the State, and since nearly all of the low-level waste is generated at nuclear power plants, it would make better sense for Michigan to store such waste at the site of generation, rather than transport and dispose of it at considerably greater risk to the public health and environment.

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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.