SJR 19

INTERIM STUDY OF SOLID WASTE MANAGEMENT

Environmental Quality Council
Report to the 52nd Legislature

January 1991

Senate Joint Resolution 19

SOLID WASTE MANAGEMENT

Final Report

January 1991

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SUMMARY OF FINAL EQC RECOMMENDATIONS AND PROPOSED LEGISLATION

INTEGRATED WASTE MANAGEMENT

Recommendation #1

Establish a target of reducing the volume of the state's solid waste stream by 25 percent to be achieved by the year 1996.

Recommendation #2

Establish integrated waste management as state policy.

Recommendation #3

Update the 1981 state plan for solid waste to incorporate integrated waste management.

Recommendation #4

Direct the DHES to provide technical assistance to local governments, citizen groups and the private sector on the development of integrated waste management programs.

Recommendation #5

Require state agencies, the legislature and university system to prepare and implement source reduction and recycling plans.

Recommendation #6

Require state government by 1992 to establish purchasing specifications for and procure supplies and materials composed of recycled material when technologically practical and economically feasible.

Recommendation #7

Establish a goal that by 1996, 95 percent of the paper and paper products used by state agencies, universities and the legislature be composed of recycled rather than virgin material.

Recommendation #8

Establish a task force to recommend additional mechanisms for state government to develop markets for recycled products.

Recommendation #9

Establish Class E carrier authority for the transport of recyclables.

Recommendation #10

The Department of Health and Environmental Sciences should develop a procedure for measuring progress toward achieving the 25 percent waste reduction goal.

IMPORTATION AND INTERSTATE COMMERCE

Recommendation #11

A Mega-Landfill Siting Act to regulate the development of landfills that receive 200,000 tons or more of waste per year. The Act is patterned after the Montana Major Facility Siting Act.

Recommendation #12

A local government referendum on the development of a mega-landfill.

Recommendation #13

An extension of the existing moratorium on solid waste importation.

Recommendation #14

An initial $5 per ton surcharge on all out-of-state waste disposed of in Montana.

Recommendation #15

Direct the Department of Health and Environmental Sciences (DHES) to conduct an economic study to estimate the full costs to the state associated with disposal of out-of-state waste. The study should provide a basis for determination and justification of a permanent surcharge on disposal of out-of-state waste.

Recommendation #16

In the event a mega-landfill is developed, the DHES should be authorized to hire up to five additional staff, if necessary, to regulate on-site the landfill's operation.

PUBLIC VERSUS PRIVATE SYSTEMS

Recommendation #17

Public notice should be required for proposed new solid waste systems.

Recommendation #18

If interest is expressed in a privately-owned system, a public hearing should be held at the outset of the process.

Recommendation #19

The Department of Health and Environmental Sciences should develop a procedure and criteria to compare public and private proposals.

Recommendation #20

Preference should be given to private industry if costs and services are substantially equal.

FUNDING SOLID WASTE MANAGEMENT

Recommendation #21

The solid waste program should be funded by a combination of continued support from the General Fund and user fees.

Recommendation #22

The user fee should be collected through a requirement for an operating license from the Department of Health and Environmental Sciences.

Recommendation #23

The annual license fee should include:

* a base rate component;
* a component based on the volume of waste being disposed; and,
* a fee for review of new license applications.

Recommendation #24

The recommended annual funding level for FY 92 and FY 93 for the solid waste program is $614,000 with a total staff at full implementation of 13 FTE.

LOCAL GOVERNMENT ASSISTANCE

Recommendation #25

Solid Waste Districts should be able to issue limited tax-backed revenue bonds.

Recommendation #26

Provide municipalities and counties clear authority to issue bonds.

Recommendation #27

The authority of local governments to determine the method of collecting fees should be more flexible.

Recommendation #28

Current statutory language referring to Refuse Disposal Districts and Garbage and Ash Collection Districts should be consolidated and made consistent with the definitions and the use of term "solid waste management" in public health statutes.

Recommendation #29

Statutes should be clarified to allow access to Board of Investment programs.

Recommendation #30

Counties should have clear authority to pledge Solid Waste District income to bonds.

INFECTIOUS WASTE

Recommendation #31

Standards should be established for waste management, including separation, containment, storage, and transportation.

Recommendation #32

Landfilling of untreated infectious waste should be prohibited beginning April 1993.

Recommendation #33

Responsibility for licensing and regulation should be placed with the respective boards or agencies that license professions, occupations or health care facilities.

HOUSEHOLD HAZARDOUS WASTE

Recommendation #34

The Department of Health and Environmental Sciences should develop a technical assistance program to aid local governments and the private sector in developing hazardous waste collection and exchange programs.

Recommendation #35

The Department of Health and Environmental Sciences should serve as a clearing house for information on chemical compatibility and on alternatives to the use of products containing hazardous and toxic materials.

Recommendation #36

The Department of Health and Environmental Sciences and the Office of Public Instruction should jointly develop a school curricula on hazardous waste reduction for grades K-12.

WASTE OIL

Recommendation #37

Direct and fund (as funds become available) the Department of Health and Environmental Sciences to develop an oil recycling awareness program.

Recommendation #38

Require oil retailers to visibly display at a prominent place within the store a sign indicating the location of the nearest waste oil collector. A general sign for this purpose is to be developed and distributed by the department as part of its recycling awareness program.

INTRODUCTION

Solid waste management in Montana, and indeed the nation, has entered a period of transition. One need only examine a few trends to realize that solid waste will be managed differently in the future than it has been to date.

- New, more stringent federal regulations, known as Subtitle D, will change the standards by which landfills are sited, constructed and operated. In particular, these regulations will increase the level of technical expertise required to manage solid waste and the costs associated with doing so;

- The number of landfills in Montana is decreasing. In 1980 approximately 250 landfills were open; 112 are licensed today. The Department of Health and Environmental Sciences estimates that as a result of Subtitle D regulations, the number of landfills in the state may eventually drop to between 35 and 50;

- Solid waste professionals across the country are developing an integrated approach to solid waste management, emphasizing waste reduction and recycling over more traditional practices such as landfilling. The Environmental Protection Agency has established a national goal of reducing the waste stream by 25 percent by the year 2000;

- Of the ten landfills in the state with ground water monitoring systems, eight are leaking leachate into ground water. Because 45 percent of all Montanans depend upon ground water for their drinking water supplies, potential ground water contamination from landfill leachate is a growing concern; and,

- As evidenced by the November 1990 elections, solid waste management - particularly the issue of imported trash - has become a political issue.

While the 51st Legislature (1989) enacted a half-dozen solid waste related bills, including a bill requiring ground water monitoring at certain landfills, by the end of the session it was apparent that many solid waste management issues remained to be resolved. Local governments were concerned that the Environmental Protection Agency's new Subtitle D regulations (see Section I for a description) would put them out of the solid waste business; environmental organizations were critical of the state's limited authority to regulate infectious waste; many people questioned the constitutionality of the state's newly enacted moratorium on the importation of solid waste; and to

regulate solid waste and respond to these issues, the state solid waste program had a field staff of only 1.5 fulltime equivalents.

In recognition of these and other issues, the 51st Legislature enacted Senate Joint Resolution 19 directing the Environmental Quality Council (EQC) to evaluate and develop recommendations on solid waste management (see Appendix A).

This report presents the EQC's findings and recommendations to the 52nd Legislature. A summary of the Council's final recommendations begins on page 1. The summary of the Environmental Protection Agency's proposed Subtitle D regulations and background information on landfill safety and ground water protection, found in Section I, lays a context for the study. The remainder of the sections in the report are organized by issue; each section contains a part with background information on an issue, the policy options the Council considered, and the Council's recommendations.

Study Process

To bring the necessary expertise to the study, the Environmental Quality Council appointed a 17-member advisory committee made up of people from across the state who are involved in solid waste management (the members are listed in Appendix B). The Council assigned the Solid Waste Management Advisory Committee (SWMAC) the responsibility of scoping issues, developing policy options, and making recommendations for the EQC's consideration.

The SWMAC, chaired by EQC member Senator Tom Beck, conducted its first meeting in December 1989. The first task the Committee completed was prioritizing the issues to be addressed by the study. The range of the issues the Council was asked to address by SJR 19 was extremely broad - too broad to be completed in a single interim study. Accordingly, the SWMAC identified six priority issues for the study. These priorities, later approved by the EQC, were as follows:

* 1. State compliance with Subtitle D;
  2. Barriers to the regionalization of solid waste disposal;
  3. Revision of the state solid waste management plan;
  4. Importation and interstate transportation;
  5. Funding for the state solid waste management program; and,
  6. Special wastes, including infectious waste, household hazardous waste and waste oil and waste tires.

The study process involved the SWMAC addressing one issue at a time. Once the six priority issues were identified, EQC staff prepared a series of informational background papers on each of

the issues for the SWMAC. Over the course of the next five meetings from January to September 1990, the SWMAC analyzed and discussed each issue, developed policy options, and presented recommendations to the Environmental Quality Council for the Council's consideration. The EQC's consideration of the SWMAC's policy options and recommendations was accompanied by panel discussions, public testimony and presentations by SWMAC members and EQC staff. While in some instances the Council modified or expanded upon the Advisory Committee's recommendations, the SWMAC laid the framework for most of the EQC's final recommendations.

To bring needed expertise to the study, the EQC hired the consulting firm of Huntington and Fenter to assist with the financing and local government sections of the study. In addition, two graduate students from the University of Montana with experience in recycling worked as interns for the study, conducting research on landfill safety and recycling.

To keep the public and various interest groups abreast of developments in the study, the Council periodically made informational mailings to over 250 people. As requested, Council members and staff also made presentations to individuals, groups and at meetings on the progress and recommendations of the study.

* Note: The Subtitle D regulations, expected to be promulgated in early 1990, have yet to be finalized nearly one year later. As a result of uncertainty about what precisely the final Subtitle D regulations will require it was not possible to complete this section of the study.

SECTION I.

BACKGROUND ON LANDFILL SAFETY AND PROTECTION OF GROUND WATER

A. RCRA SUBTITLE D REGULATIONS

In 1988, under the authority of the federal Resource Conservation and Recovery Act (RCRA), the U.S. Environmental Protection Agency (EPA) proposed new regulations for the siting, operation and closing of municipal solid waste landfills. Commonly referred to as Subtitle D, these regulations are expected to drastically alter the way solid waste is managed in many areas of the country. While the promulgation of these rules has been delayed repeatedly, the most recent word from EPA headquarters in Washington, D.C. is that the regulations will be finalized in Spring 1991.

The following summarizes the major provisions of the regulations as they were proposed in 1988:

Location Restrictions

The proposed regulations specify types of locations that require special siting restrictions or performance standards. New landfills that are sited in wetlands, fault areas, seismic impact zones and unstable areas will be subject to siting restrictions. Both new and existing landfills proximate to airports or within a 100-year floodplain will be subject to performance standards.

Operating Criteria

Subtitle D operating criteria would apply to both new and existing facilities. These fall into four major categories: day-to-day operating criteria, closure, post-closure care, and financial assurance requirements. A brief description of the new requirements for each of these categories follows:

a. Day-to-Day Operating Criteria

The regulations would require landfill owners or operators to implement a program to detect and prevent attempts to dispose of regulated quantities of hazardous waste; apply cover material on a daily basis; monitor for concentrations of methane gas and take remediation steps if threshold levels are exceeded; prohibit the disposal of 55 gallon drums filled with liquids; design, construct, and maintain a system to prevent water run-on from a 25-year storm and a run-off control system to collect and control at least the volume of water from a 24-hour, 25-year storm; keep extensive records; and develop state notification procedures and closure and post-closure plans.

b. Closure

The regulations would require a landfill owner or operator to submit a closure plan (for the purpose of minimizing leachate and methane gas problems after closure) to the state for approval, and upon closure, to certify to the state that closure was completed in accordance with the specifications of the approved plan.

c. Post-Closure

Following closure of a landfill, the owner or operator would be required to conduct two phases of post-closure care. The first phase involves ground water and methane gas monitoring, and routine maintenance, as necessary, for a minimum of 30 years. The second phase involves less intensive ground water and methane gas monitoring beyond the first 30 years of post-closure care. The length of this phase and exact sampling or maintenance requirements would be established by the State.

d. Financial Assurance

The regulations would require the landfill owner or operator to demonstrate "the financial and technical ability to conduct closure and post-closure care, and, if applicable, corrective action for known releases." An exclusion from these requirements is provided for state and federal government entities, but not local governments. The amount of the financial assurance required would be based upon written site-specific estimates, and would be adjusted annually for inflation.

Design Criteria for New and Existing Landfills

The state would be required to establish risk-based design goals for new landfills (based upon a 1×10^{-4} to 1×10^{-7} lifetime cancer risk). New landfills would have to be designed with liners, leachate collection systems and final cover systems as necessary to meet the state-established design goal. Existing landfills would be required to install a final cover which prevents infiltration of liquid into the waste, but would not be required to install liners or leachate control systems.

<u>Ground Water Monitoring and Corrective Action</u>

The draft regulations require that within six months of the effective date of the rule, the state must specify a schedule for landfill owners or operators to comply with ground water monitoring requirements. These requirements include a two-phase monitoring system and corrective action if contamination is detected. Phase I requires the owner or operator to monitor for 25 parameters. If contamination is detected, then the owner or

operator would be required to comply with phase II monitoring for an extensive list (3 pages long) of additional constituents. Corrective action by the owner or operator would be required if state-established groundwater "trigger levels" for phase II monitoring constituents are exceeded at a statistically significant level.

An exemption from these monitoring requirements is allowed for existing landfills only if the owner or operator can demonstrate to the state that (due to hydro-geological conditions) there is no potential for migration of hazardous constituents into groundwater.

Implications of Subtitle D for Montana

As a result of Subtitle D regulations, the cost of landfilling in Montana is expected to increase dramatically. One publication of the National Solid Waste Management Association (NSWMA) estimates the cost of siting and developing a 100-acre landfill to be in excess of $42 million. While this estimate is high for Montana, several Montana communities in the process of developing Subtitle D-quality landfills expect costs to total several million dollars. According to one consultant, the option of hauling solid waste to a landfill up to 130 miles away will be economically competitive with siting and developing a new Subtitle D landfill.

Operating costs will also increase for both new and existing landfills. This will be particularly true for small, rural landfills that will now be required to have operators on-site whenever the landfill is open for business and to comply with daily cover requirements. Financial assurance and post closure care requirements will place a significant financial burden on small operators, public or private.

The Department of Health and Environmental Sciences (DHES) estimates that the number of landfills in the state, as a result of Subtitle D requirements, may eventually decline from 112 in 1989 to between 35 and 50 in the future.

As proposed, the State of Montana must adopt and enforce these regulations in order to retain state control over solid waste management. The DHES estimates that a minimum of three additional staff will be necessary for the state to comply with Subtitle D. If the state fails to adopt an approved Subtitle D regulatory program, responsibility for enforcing the regulations would fall back to EPA. While this would elimintate the need to hire additional staff for the state program, federal control of solid waste management is potentially an even more expensive option. According to Montana EPA officials, the final rules will provide states that adopt Subtitle D with the discretion and flexibility to grant case-by-case exemptions to some requirements

(e.g., synthetic liner and some monitoring requirements). However, if the state fails to adopt Subtitle D and EPA enforces the program, no exemptions will be allowed. EPA has intentionally built in a strong incentive for states to adopt the new regulations.

B. LANDFILL SAFETY AND GROUND WATER PROTECTION

Data on the effect of landfills on ground water supplies in Montana are limited. A new state law requires ground water monitoring at landfills that serve a geographic area with a population of 5,000 or more persons. However, the administrative rules to implement the ground water monitoring requirements are not yet final, and the program is just commencing. To date, limited monitoring at ten landfills reveals that eight are contributing leachate to groundwater supplies. According to DHES officials, contamination at several of these landfills may be severe enough to warrant future remedial action.

Because 45 percent of all Montanans are dependent upon ground water for their drinking water supplies, the potential for ground water contamination from landfill leachate is an issue of growing concern. The need to better protect drinking water supplies is a major impetus for the federal Subtitle D regulations. Despite recent advances in landfill technology such as synthetic liners, leachate control systems, and methane and groundwater monitoring systems, questions remain: Are these new technologies adequate to ensure environmental protection? How well do landfills perform in a semi-arid climate, such as Montana, relative to moister climates in the South and Midwest? In designing a landfill, what trade-offs should be made between technology and environmental conditions such as geology, distance to ground water and soils? There are few easy and conclusive answers to these questions. However, to provide a framework for analyzing these questions, the remainder of this section will examine the production and composition of solid waste leachate, the components of a high technology landfill, and the performance record of liners and collection systems.

Municipal Solid Waste Leachate

The major consideration in landfill design is controlling leachate. Precipitation and liquids already present in the waste combine in a landfill to produce leachate. As water migrates through the waste it mixes with pollutants forming a potentially toxic "soup". Leachate production is a function of a variety of factors, including precipitation levels, PH, and waste composition. Leachate can be composed of a variety of potential toxins such as organic acids, heavy metals, and solvents. Due to its potential toxicity, if leachate migrates out of a landfill, it poses a threat to ground and surface water.

Dr. Kirk Brown of Texas A&M University, states "there is ample evidence that the municipal landfill leachates contain toxic chemicals in sufficient concentration to be potentially as harmful as from industrial waste landfills." The composition of the waste itself dictates why solid waste leachate is often as toxic as hazardous waste leachate. While not receiving the large quantities of toxins a hazardous waste facility does, solid waste landfills do receive significant amounts from small quantity generators, and individual households. Under the Resource Conservation and Recovery Act (RCRA) a small quantity generator can legally send up to 220 lbs. (100 kgs) of hazardous chemicals to municipal landfills on a monthly basis. Unused pesticides, solvents, oils, cleaning compounds, degreasing compounds, and paint solvents can be present in amounts which produce toxic leachate (Brown, 1988).

One key to preventing landfill leachate involves working on factors far removed from the landfill itself. While a landfill can be equipped with all the state of the art technology available, the potential for future problems still exist if toxic materials are allowed to enter the landfill. By strictly regulating what is put into landfills it is possible to eliminate or curb the production of toxic leachate.

Modern Landfill Design

A modern landfill is engineered to prevent leachate from entering the environment and to collect it for treatment. A landfill using current technology has four main components: liners, the leachate collection system, the cover or cap, and a methane monitoring/venting system. In order for a landfill to adequately protect the environment, all components of the system must be functioning. A failure of the liner or collection system can lead to ground or surface water contamination (Montague, 1982).

Liners are laid over the base of the landfill depression and can be made from a variety of materials, natural and synthetic. The leachate collection system (LCS) is generally a piping system installed below the waste fill areas in order to collect the leachate and transport it to a treatment facility. The final component of a landfill is the cover or cap, which is made of several sloping layers of clay or synthetic liners covered by topsoil (Office of Technology Assessment, 1989).

Presently in Montana, there are no landfills with synthetic liners or LCS's. Some landfills in the state rely on natural soil liners, usually on-site clays. The Department of Health and Environmental Sciences (DHES) is currently reviewing plans for landfills in Logan and Rosebud County that would include synthetic liners and LCS's.

Liners

Leachate may build up within a landfill and produce hydraulic pressure at the base of the structure. The purpose of lining a landfill is to prevent leachate from reaching ground water. A liner acts as a hydraulic barrier, which restricts leachate movement.

Soil Liners

Soil/clay is the most common landfill liner material. When available, natural clay present at the site is utilized. Otherwise, it is necessary to transport clays to the site or make use of engineered soils. An engineered soil is a mixture of silts and clays combined together for low permeability. Sodium bentonite is often used in engineered soils (Office of Technology Assessment, 1989).

Whether a clay liner will leak is influenced by the clay's permeability and the hydraulic pressure exerted upon it. Clay liners have a greater hydraulic conductivity than synthetic liners. As leachate accumulates above the liner, the leachate will be absorbed into the clay (OTA, 1989). Little is known about the absorption or reaction of certain organic chemicals with clay. Certain solvents can cause water to migrate out of the soil, causing desiccation and shrinkage of the soil liner. A desiccated liner is subject to cracking, which increases the likelihood of leakage (Seminar Publication: Requirements for Hazardous Waste Landfill Design, Construction, and Closure EPA/625/4-89/022). A study at Texas A&M University found clay liners to leak at rates much higher than expected. This study demonstrated that all clay liners will leak, even if they only contain water. Certain chemicals may cause clay liners to leak at rates 1000 times faster than under normal circumstances (Courtney, 1981).

Despite these drawbacks, soil liners have some advantages over synthetics. In areas of seismic activity, clay liners are beneficial because they can reseal. Clay liners are also somewhat resistant to the effects of freezing and thawing (EPA/625/4-89/022).

Flexible Membrane Liners

Synthetic or flexible membrane liners (FML) are thin polymer sheets usually 0.3 to 0.6 cm thick. These sheets of rubber, polyvinyl chloride, or a variety of polyethylenes, are designed for low permeability to organic compounds (OTA, 1989).

FML leakage occurs by two routes: directly through holes or tears, or through molecular diffusion (EPA/625/4-89/022). Despite technical advances in material design, synthetic liners

will leak. A study by Geoservices (Boyton Fl.) for the EPA (1987) states:

> A common misconception regarding FML's is that they are impermeable, that is, no fluid will pass through an intact FML. However it is important to realize that all materials used as liners are at least slightly permeable to liquids or gases and a certain amount of permeation through liners should be expected. Additional leakage results from defects such as cracks, holes, and faulty seams (Geoservices: Background Document, 1987).

Defects in the FML's result from a variety of influences. Leaks may develop during the manufacture of the liner. Lumps of carbon in the molten plastic produce bubbles or weak spots in the film that may later become holes in the liner. In addition, workers or machines often damage the film during installation. FML's are laid out in sheets approximately 30 feet in width, and joined together by seams that are either welded or glued. Over thousands of feet of seam, gaps are likely (Geoservices: Background Document, 1987).

Leachate can also penetrate an FML by molecular diffusion driven by concentration gradients. Simply stated, chemicals will move from areas of higher concentrations to areas of lower concentration (Raloff, 1989). All liners will be permeable to chemicals to a certain degree. Manufacturers of synthetic liners test their materials to determine how well they will withstand various chemicals (Lining of Waste Containment and Other Impoundment Facilities, EPA/600/2-88/052). However, it is difficult to test for the hundreds of chemicals that may be found in a solid waste landfill, not to mention the resulting thousands of chemical combinations. Thus a wide variety of synthetic liners are available, with differing degrees of resistance to various chemicals.

A number of citings by the EPA in the Federal Register point out the Agency's admission that landfills will leak despite advanced technology. The Federal Register, February 5, 1981, states that: "Manmade permeable materials that might be used for liners or covers are subject to eventual deterioration, and although this may not occur for ten, twenty, or more years, it eventually occurs and, when it does, leachate will migrate out of the facility." This is further emphasized in the Federal Register of July 26, 1982: "A liner is a barrier technology that prevents or greatly restricts migration of liquids into the ground. No liner, however, can keep all liquids out of the ground for all time. Eventually liners will either degrade, tear, or crack and will allow liquids to migrate out of unit" (Montaque, 1987).

Leachate Collection Systems

Leachate collection systems are the primary mechanism for removing leachate from a landfill. Perforated pipes are placed beneath the entire landfill and covered with gravel or a synthetic drainage material. In landfills with double liners, the pipes are placed above the top liner and between the two liners. The pipes are designed to collect leachate for removal to a treatment facility (OTA, 1989). Leachate is either pumped directly via pipes to a sewage treatment plant or stored for eventual transport by truck. In some cases the leachate is treated on site. The LCS is essential in order to remove leachate and avoid excessive hydraulic pressure. If the hydraulic pressure in the landfill builds, the potential for liner failure increases (EPA/625/4-89/022).

The primary concern with LCS's is clogging. LCS's in hazardous waste landfills have been found to be susceptible to clogging by silt, mud, growth of micro organisms, or chemical reactions. In order to avoid problems with clogging, manufacturers and researchers have developed a battery of lab tests to simulate conditions influencing the performance of a LCS (EPA/625/4-89/022). It is very difficult, however, to predict all potential influencing factors and conditions. An additional concern is the length of time that a LCS must remain in operation. The LCS must continue to drain leachate from the facility during the landfills operational life and after closure. Thus, LCS's must withstand chemical and biological action for ten, twenty, thirty, or more years (EPA/625/4-89/022).

Siting and Design

Proper siting is one of the most important considerations in landfill safety. To avoid potential natural hazards, Subtitle D regulations place siting restrictions on landfills located in wetlands, fault areas, seismic impact zones and unstable areas, and place performance standards on both new and existing landfills proximate to airports or within a 100-year floodplain. To minimize the threat to ground water, it is preferable to site landfills in locations with good geological and hydrological conditions. Examples include locations where the water table is located deep underneath the ground; where soils are relatively impermeable; and in arid climates that receive little percipitation, thereby reducing the potential for leachate generation. These and other environmental factors are major considerations in the proper siting and design of a landfill.

Other States

To accurately evaluate landfill safety, data on the performance of modern, operating landfills are needed. Unfortunately this information is difficult to obtain. A great

deal of information is available detailing why municipal solid waste and hazardous waste landfills in several states such as Florida, New Jersey, and Virginia have failed. However, due to climatic differences between those states and Montana, these experience have little bearing on the situation in Montana. Extremely large landfills in states with similar climatic conditions (e.g., South Dakota, Eastern Washington) are either in the planning stage or have been in operation for such a short time that data on their performance is limited.

However, one study concerning landfills and ground water contamination done by the North Dakota Geological Survey (1989) provides some insight. Landfills investigated were, for the most part, non-lined and poorly sited facilities. The study found that significant amounts of leachate were generated in a semi-arid climate, and posed a significant threat to ground water (Murphy, 1989).

Conclusion

As this section has shown, modern municipal solid waste landfills are not fail-safe systems. While the technology behind liners and LCS's is advancing, their long-term effectiveness cannot be guaranteed.

Therefore, strategies to effectively protect ground water from leachate should insure that landfills are properly sited and potential contaminants are prevented from entering the landfill.

Probably the most secure landfill is one that utilizes both clay and FML in a double lined system. Schematically this system takes on the appearance of a multilayered cake; the composite liners are layered above each other with leachate control systems both above and below the first liner. This type of system utilizes the best protection qualities of each component. However, despite this design, long term effectiveness and durability are difficult to either predict or guarantee.

Literature Cited

Brown, Dr. Kirk. 1988. An Estimation of the Organic Constituents of Hazardous and Municipal Waste Landfill Leachates, Hazardous Waste and Hazardous Materials, Vol. 5, No. 1 Spring 1988 (As reported in Hazardous Waste News, 15 August 1988).

Courtney, Michael. 1981. Press Release from Texas A&M University.

Geoservices, Inc. 1989. Background Document on Bottom Liner Performance in Double Lined Landfills And Surface Impoundments National Technical Information Service, Springfield, VA. (As reported in Hazardous Waste News 14 February 1989).

Herrmann, Jonathan G. 1986. Technical Guidance Document: Construction Quality Assurance for Hazardous Waste Land Disposal Facilities, Hazardous Waste Engineering Laboratory, Cincinnati, OH. EPA/530-SW-86-031.

Matrecon, Inc. 1989. Lining of Waste Containment and Other Surface Impoundment Facilities. EPA/600/2-88/052 Alameda, CA. September 1988.

Montaque, Peter. 1982. Hazardous Waste Landfills: Some Lessons From New Jersey. Civil Engineering, September, p.53.

Montaque, Peter, ed. 1987. EPA Says All Landfills Leak, Even Thouse Using Best Available liners. Hazardous Waste News, 10 August.

Murphy, Edward C. 1989. Organic and Inorganic Contaminants in Shallow Groundwater at Six Selected Municipal Landfills in North Dakota. North Dakota Geologic Survey, Water Resources Research Institute, Bismarck, ND.

Raloff, J. 1989. Unexpected Leakage Through Landfill Liners. Science News, Vol. 135, 18 March, p. 164.

U.S. Environmental Protection Agency. 1989. Office of Research and Development, Seminar Publication: Requirements for Hazardous Waste landfill Design, Construction, and Closure, EPA/625/4-8/022 Cincinnati, OH. August 1989.

U. S. Congress. 1989. Office of Technology Assessment, Facing America's Trash: What Next for Municipal Solid Waste?, OTA-0-424 (Washington, D.C.: U.S. Government Printing Office, October 1989).

SECTION II.

INTEGRATED WASTE MANAGEMENT

A. BACKGROUND

1. Integrated Waste Management Concept

Integrated waste management is the coordinated use of a combination of techniques and programs to manage the municipal solid waste stream. It is based upon the fact that the waste stream is composed of distinct components, each of which can be managed and disposed of separately. An integrated waste management system is designed to address local problems and to respond to local conditions, resources and economies.

Integrated waste management involves a hierarchy of preferred management options. While there is some variation in the components of this hierarchy, it generally contains the following elements:

- First, source reduction - practices that decrease the weight, volume or toxicity of material entering the solid waste management stream after consumer or commercial use but prior to recycling, incineration or disposal;

- Second, reuse - the practice of purchasing durable products that may be used more than once; developing alternative uses that extend a product's useful lifetime; and, passing on products no longer needed for others to use;

- Third, recycling - all activities involving the collection of recyclable material such as glass, paper or plastic; the processing of recyclables to prepare them for resale; and the marketing of recovered material for use in the manufacture of similar or different products;

- Fourth, composting - the controlled biological decomposition of organic matter into humus; and,

- Finally, landfilling and incineration -- it is not feasible to manage 100 percent of the waste stream through the forementioned practices; some component of the waste stream must be landfilled or incinerated.

2. Integrated Waste Management in Montana

With a few exceptions, integrated waste management has developed slowly and on a fairly small scale throughout Montana. Many projects are in their infancy, and official policies are still being formulated. Lacking state leadership and support,

Montana's local governments and citizens have taken a piecemeal approach to developing integrated waste management programs. The most effective strategies, and until recently the only alternatives to landfilling, have been developed over time by the commercial recycling industry. Recycling remains today as the primary - if not sole - alternative to landfilling and incineration in Montana. Currently there are over 35 commercial recycling centers doing business in the state, ranging from single location buy-back centers accepting only one material to statewide, multi-material recycling facilities.

Despite the lack of financial and technical assistance available for recycling in Montana, many innovative and successful programs have been developed around the state. Although in some instances local governmental agencies have been involved, the majority of effort has come exclusively from community-based citizen groups. While the nature of these groups often makes it difficult to obtain information about projects, a recent statewide survey identified 14 communities with active or emerging recycling projects. In addition to projects in each of the state's major cities, the survey identified activity in smaller communities such as Big Timber, Big Fork, Dillon and Ennis. Active groups have also formed to discuss solid waste management issues and options in Chester, Conrad, Wolf Point, Sydney, Miles City, Livingston and Red Lodge. A description of these projects may be found in Appendix C.

B. POLICY OPTIONS AND COUNCIL DELIBERATIONS

At its April 27, 1990 meeting, the Council received testimony on integrated waste management, and discussed options for developing a statewide integrated waste management program with a roundtable panel consisting of Sigurd Schuerle, Minnesota Office of Waste Management; James Goerhung, Bozeman City Council; Cesar Hernandez, Cabinet Resource Group; Doug Stewart, Montana Recycling; and, Lynn Mounsey-Inge, Office of the Mayor of Spokane. After hearing of the successes and tribulations of programs in Minnesota and Washington, and of the long history of recycling in Montana, Council members concluded the meeting with a strong belief that an integrated waste management program in Montana was both desirable and feasible.

This initial discussion of integrated waste management yielded three guiding principles:

- Montana's solid waste management strategy needs to incorporate the concept of integrated waste management;
- At least initially, the state's approach to integrated waste management should be voluntary rather than mandatory, and

should provide opportunities for management alternatives to landfilling and incineration; and,

- State government should take a leadership role in developing and implementing an integrated waste management strategy.

The SWMAC subsequently developed five policy options for integrated waste management for the state. These options were presented to the Council and included:

1. The state should assume no role and leave decisions about integrated waste management to local government and the private sector;

2. The state should develop and implement an administrative integrated waste management program for state agencies;

3. The state should update the state plan for solid waste management and provide planning direction and guidelines to local government;

4. The state should provide technical assistance to local government and the private sector in the development of integrated waste management programs; and

5. The state should develop a comprehensive, mandatory, statewide program to be implemented by local government.

The SWMAC rejected option 1 because it felt that state-level direction was necessary. The Committee also rejected option 5 as a measure that is too aggressive and inflexible for the present circumstances in Montana. The SWMAC's recommendation to the Environmental Quality Council - a recommendation with which the Council concurred - was that options 2-4 above should be adopted immediately and phased in over the next five years. Further, the SWMAC recommended that if integrated waste management programs have not adequately developed around the state by the year 2000, the option for a mandatory program should be revisited.

Over the course of three Council meetings in October, November and December, these general recommendations were then refined by the Council into final recommendations and the legislative proposals contained in Appendices D and E.

C. SUMMARY OF COUNCIL RECOMMENDATIONS

The Environmental Quality Council's recommendations on integrated waste management include the following:

Recommendation #1:

Establish a target of reducing the volume of the state's solid waste stream by 25 percent, to be achieved by the year 1996.

Recommendation #2:

Establish integrated waste management as state policy.

Recommendation #3:

Update the 1981 state plan for solid waste to incorporate integrated waste management.

Recommendation #4:

Direct the DHES to provide technical assistance to local governments, citizens groups and the private sector on the development of integrated waste management programs.

Recommendation #5:

Require state agencies, the legislature and the university system to prepare and implement source reduction and recycling plans.

Recommendation #6:

Require state government by 1992 to establish purchasing specifications for, and procure supplies and materials composed of, recycled material when technologically practical and economically feasible.

Recommendation #7:

Establish a goal that by 1996, 95 percent of the paper and paper products used by state agencies, universities and the legislature be composed of recycled rather than virgin material.

Recommendation #8:

Establish a task force to recommend additional mechanisms for state government to develop markets for recycled products.

Recommendation #9:

Establish Class E carrier authority for the transport of recyclables.

Recommendation #10:

The Department of Health and Environmental Sciences should develop a procedure for measuring progress toward achieving the 25 percent waste reduction goal.

SECTION III.

IMPORTATION AND INTERSTATE COMMERCE

A. BACKGROUND

The issue of the importation of garbage generated out-of-state for disposal in Montana is both controversial and emotional. Montana is a target for imported waste because of the state's low population density, abundance of environmentally desirable landfill sites, and because of market conditions that make it potentially profitable to ship waste to Montana for disposal. In the last year, two proposals have surfaced that would bring solid waste from out-of-state to Montana for disposal. Proponents tout economic benefits to local communities and the state's ideal conditions for landfilling. Other citizens, however, fear that solid waste will ruin the state's "Big Sky" image, and that Montana may become the nation's garbage dump.

Under SJR 19, the Council's charge was to develop recommendations for a rational policy on importation as a long-term substitute for the current moratorium on certain interstate transportation of solid waste.

1. Legal Issues

State regulation of the importation of solid waste presents a number of legal challenges and complications. The purpose of the following sections is to provide background on some of the legal considerations that affect state policy on importation. In addition to briefly describing the Constitutional issues surrounding the existing state moratorium on importation, the sections that follow will present and analyze options for regulating importation.

a. Why is the Present Ban on Importation Unconstitutional

House Bill 752, passed during the 51st session of the Montana State Legislature, places a moratorium on certain interstate transport of solid waste. Specifically, the bill stated that "... a person may not transport solid waste into Montana until October 1, 1991." However, the bill provided an exclusion: "A person who transported solid waste into Montana before [the effective date of this Act (which was immediate)] may continue to transport solid waste into Montana subject to the limitation that the amount he transports into Montana during any calendar year of the moratorium does not significantly exceed the amount he transported into Montana during calendar year 1988."

It is likely that the moratorium, if challenged in court, would be found to be a violation of the Commerce Clause contained in Article I, section 8, of the United States Constitution. The Commerce Clause states that "Congress shall have Power ... to regulate Commerce ... among the several States..." The clause was intended to prevent the balkanization of the states by making it illegal for states to erect trade barriers.

Case law supports the contention that the moratorium would be declared unconstitutional. In 1977, the New Jersey Legislature enacted a statute, similar to HB 752, which prohibited the transportation into the state of any solid waste from another state. The U.S. Supreme Court, in Philadelphia v. New Jersey, held that the ban violated the Commerce Clause. It is difficult to distinguish any difference between the moratorium contained in HB 752 and the New Jersey law, to which the Court stated that, "whatever New Jersey's ultimate purpose, it may not be accomplished by discriminating against articles of commerce coming from outside the state unless there is some reason, apart from their origin, to treat them differently."

b. How to Recognize Whether or Not a Law is Constitutional

While outright bans and moratoriums on interstate commerce have been declared unconstitutional, less direct and less restrictive strategies for regulating interstate commerce have been developed by numerous states. Some of these are probably constitutional, while others fall in a gray area and may be subject to being overturned by the Courts. The following questions provide a general guideline for analyzing whether or not a law or regulation is likely to withstand judicial scrutiny under the Commerce Clause:

- Is the law a flat prohibition or does it facially discriminate between instate and out-of-state waste? If it does discriminate, then it will be struck down.

- Is the law evenhanded? Generally, the same standards should apply to out-of-state as to in-state waste.

- Are the burdens imposed on interstate commerce rationally related to, or clearly excessive in relation to, the local benefits? For example, is the fee imposed on interstate waste rationally tied to reasonably anticipated expenses associated with allowing the waste to be imported?

- Can the goals of the law be achieved with a less restrictive alternative? (e.g., with less impact on interstate activities.)

c. Options for Regulating Importation that have Survived Judicial Scrutiny

There are several options for limiting or controlling solid waste importation that, in specific, narrow circumstances, the Courts have ruled constitutional. These are listed below.

Bans Based on Market Participation

The states of Delaware and Rhode Island have constitutionally banned the importation of solid waste on the basis of being market participants rather than regulators.

The effect of the market participation doctrine is to permit state or local governments to regulate importation of solid waste into disposal sites which they actually own. The courts have held that in this narrow case, when a state or local government acts as a market participant rather than a market regulator, the Commerce Clause does not apply.

One example is the case of County Commissioners of Charles County, Maryland v. Stevens. In this case, Charles County owned and operated the only sanitary landfill in the county. When the county commissioners adopted a regulation banning disposal of any waste collected outside Charles County in any public trash disposal areas in the county, Stevens, a private hauler, challenged the regulation on commerce grounds.

The Maryland Court of Appeals upheld the county regulation. The Court reasoned that the landfill had been designed and constructed to accommodate county taxpayers, and that the regulation merely limited the benefit of this service to county taxpayers who funded it.

It is important to note that the market participation doctrine has limited application: It extends only to publicly owned landfills. The court has ruled that this authority cannot be extended to privately-owned landfills, and that it does not enable a state or county to prevent the construction of a privately owned landfill. As a result, the ability to ban importation based on market participation has limited application to the circumstances in Montana.

Bans Based on Compelling Public Interests

The Courts have ruled that in the case of compelling public interest, such as preserving near-exhausted landfill space or to protect public health, it may be permissible to prevent the importation of outside waste.

In the case of Evergreen Waste Systems, Inc. v. Metropolitan Service District, a government agency in Portland, Oregon banned

the disposal of all waste originating outside of a three-county area. The purpose of the ban was to extend the life of a local landfill for six to twelve months, the time necessary to site a new landfill. Evergreen Waste Systems, which collected trash from outside the three-county area, challenged the ban on the grounds it violated the Commerce Clause.

The Ninth Circuit Court of Appeals upheld the local ordinance. The court noted that the ban applied to only one landfill in Portland as opposed to all private and public landfills in the state. Furthermore, it noted that the ordinance banned not only out-of-state waste but also most in-state waste.

The ability to ban importation based upon compelling public interest has no long-term application and thus is not a final solution to regulating importation. However, in the future, some Montana community with limited remaining landfill capacity may face a situation similar to that faced by the Portland Metropolitan Service District, and may wish to ban others from using their landfill.

Waste Flow Management Plans

Waste flow management plans provide another mechanism by which Montana might possibly regulate the importation of solid waste. Two types of limited state and local actions have survived judicial scrutiny: 1) Development of waste flow plans that direct the flow of waste to designated disposal sites; 2) enactment of laws that allow local governments to restrict waste flow to a level commensurate with need and capacity.

Recently, a New Jersey court upheld a state waste flow management program in City of Elizabeth v. New Jersey Department of Environmental Conservation. In this case, Ocean County Landfill, a private company, argued that the New Jersey State Wide Solid Waste Flow Plan violated the Commerce Clause of the Constitution because it specified that the Ocean County Landfill could receive only Ocean County refuse. The court ruled that the plan did not prohibit waste importation into New Jersey, but merely designated the disposal sites available to specific waste generators. Further, the court ruled that the state plan addressed the legitimate local concern of preventing waste disposal facilities from receiving more waste than they could handle.

In another case, Bill Kettlewell Excavating Inc. v. Michigan Department of Natural Resources, a Michigan Court upheld a state law that provides counties the discretion to deny out-of-county waste unless it has been explicitly authorized by a county solid waste plan. In this instance, the plaintiff applied to the county for approval of a plan to dispose of waste from sources outside the county at the plaintiff's private landfill. The

county denied the application on the basis of authority granted under Michigan solid waste statutes:

> A person shall not accept for disposal waste that is not generated in the county in which the disposal area is located unless ... explicitly authorized in the approved county solid waste management plan.... With regard to intercounty service within Michigan, the service must also be explicitly authorized in the exporting county's solid waste management plan.

The Court reasoned that the statute does not place authority to issue a blanket preclusion against importation of all out-of-state waste in one state official's hands. Instead, it allows each county the discretion to deny or accept outside waste, whether out-of-state or out-of-county. Further, the Court reasoned that the statute does not discriminate against interstate commerce because out-of-state and out-of-county waste is treated the same.

d. Options for Regulating Importation that are Constitutionally Questionable

Bans based upon market participation and compelling public interest, waste flow management plans and differential fee systems have all withstood legal challenge and, in some instances, may be constitutional. However, strategies for regulating importation do not end there - various states have employed a number of other, more questionable, strategies for regulating interstate commerce. Some surely are unconstitutional; others fall in a gray area and may or may not survive judicial scrutiny if challenged. The following paragraphs summarize some of the "gray area" options that have a greater risk of being overturned by the courts.

Solid Waste Recovery Standards for Large Landfills

Wyoming has promulgated regulations that require commercial solid waste management facilities that process more than 500 tons of solid waste per day to recover useful components of the waste stream. Specific recovery rates include 80 percent for aluminum; 40 percent for glass; and, 20 percent for mixed paper.

This is a creative strategy for regulating importation, as the largest landfill in Wyoming processes significantly less than 500 tons of solid waste per day. While the regulation is probably evenhanded because it applies to a landfill that receives in-state as well as out-of-state waste, it is not clear that the local benefits exceed the burden imposed upon interstate commerce. If waste recovery is an important local benefit, why is it important only for a large landfill, especially one that just happens to receive out-of-state waste. This strategy would

be stronger if Wyoming either had a state policy in place to recover waste or required its citizens to do so, regardless of landfill size.

Regulatory Hurdles and Obstacles

A number of states have established regulatory hurdles and obstacles that are intended to discourage the disposal of out-of state waste. These include but are not limited to requirements that out-of-state shippers file surety bonds, provide a manifest tracking system for imported waste, and requirements that loads be inspected or that characterization tests be submitted for sample waste loads.

The important question to ask in evaluating the constitutionality of such regulations is whether or not the regulation is evenhanded. For example, it would be necessary to inspect and conduct characterization tests for instate as well as imported waste in order for these requirements to be constitutional.

Tipping Fee Rate Based Upon Rate in State of Origin.

Indiana in 1989 adopted a plan to set the tipping fee for imported solid waste at a rate equal to the fee charged in the state generating the waste. The import rate is the difference between Indiana's rate and the average rate in the state of origin. Since the disposal rates would then be equal, there is no longer an economic incentive to ship waste to Indiana. Several other states have considered a similar approach.

Pennsylvania has challenged the Indiana law on the basis that it is unconstitutional and differentiates between instate and out-of-state waste. The law appears to be unconstitutional on two counts. First, the law facially discriminates between instate and out-of-state waste. Second, the law establishes a differential fee system for which it would be difficult to demonstrate a rational relationship between the additional costs to the state and the amount of the fee.

2. Economic Issues

Will solid waste be imported to Montana for disposal? If so, in what quantities? What are the potential costs and benefits - both economic and environmental - associated with imported garbage? The answers to these and other similar questions are essential to making informed decisions on importation policy. However, properly answering these questions requires a thorough economic analysis that is beyond the expertise of EQC staff and the resources of this study. Nonetheless, an initial analysis of these issues is presented below.

a. Will Solid Waste be Imported to Montana for Disposal

There are principally two reasons why the State of Montana is a potential target for solid waste from other states: the nation's landfill crisis and the discrepancy between disposal costs in Montana and elsewhere.

The landfill crisis in some parts of the nation is approaching monumental proportions. According to the National Solid Waste Management Association, the nation's disposal requirements will exceed existing capacity around the year 1998. The crisis is particularly acute in the Midwest and Northeast among such states as New York, New Jersey, Pennsylvania and Indiana. As disposal capacity in these states declines, the option of shipping waste to Montana or another western state with available open space for landfills becomes increasingly viable. As illustrated by **Table 1**, significant quantities of solid waste already flow from one state to another for disposal. New Jersey, for example, exported 5.5 million tons of garbage last year alone. In contrast, the State of Montana generates only 580,000 tons of waste in a year.

The deficit in disposal capacity is the result of several factors. First, the size of the solid waste stream is increasing. The Environmental Protection Agency estimates that since 1960 the amount of waste Americans generate has increased by 80 percent. This trend is expected to continue through the rest of the century. Second, the number of landfills is decreasing. Of the nations 6000 landfills in 1985, half are expected to close by 1995. These closures are the result of landfills reaching capacity and new, tighter federal environmental standards designed to protect groundwater from landfill leachate.

Finally, at the same time landfills are closing, the siting of new ones has become more difficult. In many states the NIMBY syndrome - Not In My BackYard - presents a hurdle that has prevented new landfills from being sited.

The second reason that Montana is a potential target for out-of-state waste is because, in some instances, it is cheaper to ship waste to Montana for disposal than to dispose of it in the state of origin. Disposal costs in Montana are significantly less than in much of the Midwest or Northeast. Due to limited disposal capacity, the higher value of land, and often more stringent state environmental standards for landfills, the cost of constructing and operating landfills in the midwestern and northeastern regions of the country is generally greater than in Montana and other western states. As illustrated by **Table 2**, once tipping fees reach $50 to $70 per ton, depending upon the location, it may be profitable to ship solid waste from

Table 1. Amount of Solid Waste Exported from and Imported to Selected States

STATE	YEAR	EXPORT TONS/YEAR	TO	IMPORT TONS/YEAR	FROM
Ind.	(estimate)			2,920,000	OH, KY,IL, NY, NJ
Kentucky	1989	11,000	OH	488,808	NJ
Maine	1988			45,000	
Mass.	1989	350,000			
Missouri	1987	2,000,000			
New York	1987	500,000	CT, MA, VT,		
	1989	2,400,000	VA, KY, IND		
New Jersey	1989	5,500,000	PA, OH, MI, IN, KY, AL		
Ohio	1987			1,000,000	
	1989			3,000,000	
Vermont	1987	24,000	NY, NH, MA	7,000	
West VA.	??			600,000	NJ,NY,PA

FROM: National Solid Waste Management Association

midwestern or eastern states to Montana for disposal. **Table 2** is based on 1988 data, and fees in many states may have already reached or exceeded a level that would make it financially advantageous to ship waste out-of-state for disposal.

Table 2. Sample Computation of Potential Profit Margins Per Ton on Imported Solid Waste

City	Local Tip Fee (1)		Est. Trans. by Rail (2)		MT Tip Fee (3)		Potential Profit
Cleveland, OH	$22.50	(-)	$42.50	(-)	$20.00	(=)	($40.00)
Chicago, IL	19.20		32.25		20.00		(33.05)
Denver, CO	10.65		18.93		20.00		(28.28)
New York, NY	120.00		56.31		20.00		43.69
Philadelphia	65.00		54.48		20.00		(9.48)
Seattle, WA	42.00		36.00		20.00		(14.00)
St. Paul, MN	40.06		24.00		20.00		(3.96)

NOTES:

(1) Tip fee equals per ton charge at landfill gate; cost of collection excluded. Local tip fee data are based upon a 1988 report by the National Solid Waste Management Assoc. Generally, this analysis probably underestimates local tipping fees. Current fees in many Midwestern and Eastern communities may range between $65.00 and $100.00 per ton.

(2) According to a representative of Burlington Northern Railroad, the 1985 preferential rate for coal hauled from Colstrip, MT to Minneapolis, MN was 1.7 cents/ton/mile. Transportation rates were estimated assuming a 1990 rate for a lower volume customer of 3 cents/ton/mile.

(3) The $20.00 per ton estimate used in this analysis is probably higher than the average Montana tip fee. Examples of Montana tip fees include: Bozeman, $20; Great Falls, $9.50; Helena, $16; Logan, $11; Melstone, $0; and, West Yellowstone, $65. However, as Subtitle D regulations are implemented, tip fees in Montana should increase.

In evaluating how the economics of importation may change in the future, one factor to consider is that as tip fees in Montana increase because of Subtitle D, the discrepancy between Montana tip fees and tip fees elsewhere should decrease. Many other states already require Subtitle D-level standards for landfills.

Consequently, their disposal costs will not increase as much as will disposal costs in Montana. While it is not likely that Montana rates will approach those of Philadelphia or New York City, any increase in rates will help to make Montana less attractive a place to dispose of waste.

b. Other States' Experience with Imported Waste

Montana is not the only state in the West that has been targeted for disposal of out-of-state waste. Colorado, New Mexico, Oregon, South Dakota, Washington and Wyoming have all over the last several years had proposals for a mega-landfill. Of the proposals in various states, research reveals that only two have proceeded beyond the discussion phase. The Edgemont, South Dakota and Gilliam County, Oregon projects are presented below as case studies of the potential economic benefits derived by a community from "hosting" a mega-landfill.

Edgemont, South Dakota

A Colorado-based company, South Dakota Disposal Systems (SDDS), in 1989 sited and received a permit to operate a 125 acre, Subtitle D quality landfill near Edgemont, SD. The landfill is projected, over a 20-year period, to dispose of 30 million tons of bailed municipal solid waste, drawing from a potential market of 12 to 14 states. While the landfill has yet to be constructed, the company hopes to dispose of 300,000 tons of waste in its first year of operation. Peak operating capacity is 1 million tons per year. Contracts with communities in the Midwest and Northeast are still being lined up, although the company apparently is working with officials in Minneapolis-St. Paul and reportedly will receive solid waste from as far east as New Jersey.

Background

Edgemont is a community whose economy has stagnated over the last 20 years. The area surrounding Edgemont is rural and economically dependent upon agriculture; Burlington Northern Railroad is the town's single largest employer. During the heyday of gold and uranium mining in the mid 1970s, 2,200 people called Edgemont home. However, as the mining boom busted, people began to leave. Following the decommissioning of a uranium processing plant in 1989, Edgemont's population dropped to 900.

Sponsors have been developing the Edgemont landfill project for over four years. SDDS initiated discussions with the state of South Dakota and the town of Edgemont in 1987 after the company received financial backing from six Fort Worth, Texas investors and was granted a reported $300,000 loan from Burlington Northern Railroad. SDDS made its initial landfill

permit application to the state Solid Waste Division in November 1988. Following a year of modifying and refining its license application, and negotiating with the state, the South Dakota Board of Minerals and Environment in September, 1989 granted SDDS a one-year operating license. The company has applied for a five year license extension that is expected to be granted.

One of the conditions the state placed upon the permit is that SDDS must post a $2.9 million financial assurance bond. Of the total $775,000 is for operational assurance and the remainder is to guarantee clean-up of any hazardous waste that might mistakenly be disposed of in the landfill.

The project is controversial and has its opponents. In November 1990, voters passed a citizen ballot initiative that requires legislative approval of the siting of any large-scale landfill. Because the initiative is retroactive, SDDS will be required to apply to the legislature for approval of its existing permit. The company is reported to be considering a legal challenge to the initiative's retroactivity.

Benefits to Edgemont

To the local community, the SDDS project means an economic jump-start. While only four people in Edgemont currently are employed by SDDS, at full capacity, the company projects to hire a total of nearly 50 people with an average salary of $25,000. Edgemont stands to benefit in other ways as well: the local community will receive a "host fee" of $1/ton to be split evenly between the town and the school district (potentially $.5 million annually apiece). In addition, the state will receive a fee of $3/ton, generating state revenues of up to $3 million per year.

Gilliam County, Oregon

Waste Management, Inc., a national solid waste disposal company, approached Gilliam County in February 1987 with a proposal to develop a 750-acre landfill that would receive municipal solid waste from Portland (by truck) and Seattle (by rail). After nearly three years of planning, development and negotiations, the "state-of-the-art" landfill opened for business in January 1990. The facility currently receives 1,500 tons of solid waste per day from the city of Portland, and will be expanding to 2,800 tons a day beginning in January, 1991. Waste Management is negotiating a contract to also dispose of garbage from the city of Seattle. At a rate of 6,000 tons/day, the expected life of the landfill is 50 years.

Background

Gilliam County is located along Interstate 84 in the Columbia Gorge, approximately 125 miles due east of Portland,

Oregon. Physically and culturally, Gilliam County is similar to many counties in Eastern Montana. Located on the east side of the Cascade mountains, the climate is relatively arid and annual precipitation low. The county is sparsely populated (1,800 people), and its lagging economy is primarily dependent upon ranching and agriculture.

As a result of Oregon's statewide land use planning laws, Waste Management, Inc. was required to obtain county approval for its proposed landfill. After extensive review and public comment, Gilliam County granted Waste Management, Inc. a conditional land use permit for the facility. The permit is subject to conditions that include:

- Waste Management, Inc. must receive appropriate permits from the Oregon Department of Environmental Quality and comply with all state and federal laws;

- Upon any change in circumstances or, in the event of any unanticipated consequence, the county may review and modify the conditions of the permit; and,

- Waste Management, Inc. agrees to pay Gilliam County an annual "host" fee of $300,000 or, an annual fee based upon an incremental, three-tier fee system, whichever is greater. The incremental three-tier fee system is based upon the following formula: 75 cents/ton for volumes up to 2,000 tons/day; $1/ton for volumes between 2,000 and 4,000 tons/day; and, $1.25/ton for any volume over 4,000 tons/day.

Benefits to Gilliam County

The benefits to Gilliam County are economic. Waste Management, Inc. has hired local people, and currently employs 25 at the landfill. Another 50 people work for the Gary, Indiana firm that transports the waste by truck. The number of landfill-related jobs eventually may rise to 100 or 125. The $300,000, guaranteed "host" fee, equivalent to half the county's annual general fund revenue, is spent according to the following formula: half goes property tax relief; 25 percent for economic development; and, 25 percent for the county general fund.

B. POLICY OPTIONS AND COUNCIL DELIBERATIONS

The Environmental Quality Council received considerable testimony on the issue of imported garbage. At the Council's March 9, 1990 meeting, a panel consisting of Jim Leiter, Department of Health and Environmental Sciences; Don Felstet, Felstet's Disposal; Chris Kaufmann, Montana Environmental Information Center; and, Robert Ehlers, Ehlers and Associates, shared their differing perspectives on the issue. Numerous

public comments were also received at the meeting, as well as at meetings on October 1-2, October 24, and November 14-16, 1990.

In its initial discussions, the Council considered five policy options developed by the Solid Waste Management Advisory Committee (SWMAC):

- Extend the existing moratorium;
- Let the moratorium expire and take no further action;
- Discourage importation;
- Encourage importation; or,
- Regulate, control and manage importation.

The SWMAC's recommendation to the Environmental Quality Council was to regulate, control and manage importation. The SWMAC felt that, given rising disposal costs in some areas of the Midwest and Northeast, it is inevitable that proposals to ship solid waste to Montana for disposal will continue. While erecting barriers to keep solid waste from entering the state may be desirable, to do so is legally complex, financially expensive, and may in the end be futile.

The SWMAC therefore recommended, as a practical option, that the state acknowledge that, due to market factors beyond control, solid waste is likely to be imported to Montana, and then take the steps necessary to effectively regulate, manage and control it. As general criteria, the Advisory Committee suggested that the disposal in Montana of solid waste from out-of-state should be:

- consistent with the state's landfill capacity and needs;
- supported by the local community; and,
- done in an environmentally safe fashion.

This recommendation was a compromise between permitting and discouraging importation. The members of the Advisory Committee who sought, in limited instances, to permit the disposal of out-of-state waste got what they wanted; other members of the Committee who wanted to discourage importation got what they wanted with the general criteria listed above.

The Environmental Quality Council, after discussing the SWMAC's report and recommendation, reached a deadlock. While all Council members thought importation should be strictly regulated, the Council could not agree on whether the policy should be

labeled "discouraging" or "permitting" importation. Unlike the Advisory Committee, Council members were not satisfied with the middle-of-the-road "control, regulate and manage" compromise. To get past this deadlock, the Council took a new tack. Instead of debating what to call the policy, the Council turned to evaluating specific options and strategies available to regulate importation. Two general strategies or approaches for regulating importation emerged. Each strategy contains several complimenting components that combined create a comprehensive approach to regulating importation. The two strategies, referred to as the differential fee strategy and waste flow management strategy, are described below.

Differential Fee Strategy: The core component of the differential fee strategy is a surcharge on the disposal of out-of-state waste. The revenue from the surcharge is intended to pay the cost of overseeing and regulating the disposal of out-of-state waste. Complimenting components of the strategy include increased regulations on large volume landfills and a requirement local approval of the siting of a large landfill. Specifically, potential components of the strategy considered by the Council include:

- A differential fee of $3 - $5 per ton on imported waste;
- Funding and staffing the DHES at a level adequate to regulate importation;
- Additional regulations on the siting and operation of large volume landfills;
- A local approval requirement for large volume landfills; and,
- A local governments "host" fee on out-of-state waste.

Waste Flow Management Strategy: The waste flow management strategy the Council considered is based upon the land use planning concepts of planning and zoning. The strategy would require the state, through the development of a waste flow management plan, to specify precisely where and how local governments are to dispose or their solid waste. Part of the justification for such an approach is to insure that the state has adequate disposal capacity. A component of the plan would address - consistent with Montana's need for disposal capacity - how and where to dispose of out-of-state waste. Thereafter, any imported waste would have to be disposed of in accordance with the plan.

The Council opted for the differential fee strategy, and the Council's final recommendations largely mirror this approach.

Generally, Council members felt that the top-down nature of the waste flow management strategy was inflexible, and placed an unnecessary burden and cost upon state and local government.

The Council's November and December 1990 meetings were spent refining this strategy and developing final recommendations. The following paragraphs summarize the discussion and the factors that were considered for each of the recommendations.

Differential Fee

The Council decided on an initial differential fee of $5 per ton on imported waste, and then recommended that Department of Health and Environmental Sciences (DHES) conduct a thorough economic study to determine more precisely the fee level that can be legally justified. The Council then delayed the effective date of the differential fee until July 1993 in order to allow adequate time for Yellowstone National Park and other generators who currently export waste to Montana to budget for the increased cost.

Mega-Landfill Siting Act

In response to the need for additional regulations on large volume landfills, the Council considered either placing large landfills under the Montana Major Facility Siting Act (75-20-101, MCA) or under separate but similar legislation. After discussing these two options with staff from the Governor's Office, the Department of Natural Resources and Conservation, and the DHES the Council opted to develop separate legislation, referred to as the Montana Mega-Landfill Siting Act. At the recommendation of the DHES solid waste program, a Mega-Landfill was defined as any landfill receiving more than 200,000 tons per year of waste.

The purpose of the legislation is to provide DHES with the authority to adequately insure the protection of public health, safety and welfare. The legislation includes an application review process, criteria for evaluating the environmental effects of a mega-landfill, a requirement that the developer pay the full cost of the environmental review, and a contested case hearings procedure.

The Council also recommended that, in the event a mega-landfill is developed, DHES should be authorized to hire up to five additional staff, if necessary, to regulate the landfill's onsite operation. These staff would be funded by the differential fee, and would be responsible for regulating the expansion and operations of a mega-landfill.

Local Approval Requirement

Existing statute (75-10-218, MCA) provides local government with the authority to approve or disapprove of any incinerator or landfill taking waste from outside the region. In order to provide the citizenry with greater influence in this decision, the Council decided to repeal the local approval requirement and to replace it with a provision that allows for a local referendum on the siting of a mega-landfill. The referendum is modeled after a West Virginia law.

This proposal has potential legal implications. It is possible that if challenged the Courts might rule that the referendum is arbitrary and capricious. In some instances, the referendum could in effect constitute a barrier to interstate commerce (e.g., if only landfills receiving out-of-state waste are disapproved). Despite these potential legal problems, Council members felt strongly that the people living in the immediate vicinity of a mega-landfill should have the opportunity to either endorse or veto it.

Extension of Moratorium

In addition, after much discussion, the Council decided to recommend that the existing moratorium on importation be temporarily extended for another two years. Council members based this recommendation on three assumptions:

- Additional time is needed to increase the staff and capacity of DHES to a level adequate to effectively regulate imported solid waste;
- Administrative rules to implement the Mega-landfill Siting Act and differential fee must be promulgated; and,
- Because the moratorium is temporary and is an emergency measure intended to provide Montana with two years to develop an effective solid waste regulatory program, the state has some legal basis for defending itself against a Commerce Clause challenge.

C. SUMMARY OF COUNCIL RECOMMENDATIONS

Appendices F, G, H, and O contain the Environmental Quality Council's proposed legislation on importation. Briefly, the Council's recommendations include:

Recommendation #11:

A Mega-landfill Siting Act to regulate the development of landfills that receive 200,000 tons or more waste per year. This Act is patterned after the Major Facilities Siting Act.

Recommendation #12:

A local government referendum on the development of a mega-landfill.

Recommendation #13:

Extend the existing moratorium on solid waste importation.

Recommendation #14:

Establish an initial $5 per ton surcharge on all out-of-state waste disposed of in Montana.

Recommendation #15:

Direct the Department of Health and Environmental Sciences to conduct an economic study to estimate the full costs to the state associated with disposal of out-of-state waste. The study should provide a basis for determination and justification of a permanent surcharge on disposal of out-of-state waste.

Recommendation #16:

In the event a mega-landfill is developed, the DHES should be authorozed to hire up to five additional staff, if necessary, to regulate the landfill's on-site operation.

SECTION IV.

PUBLIC VERSUS PRIVATE DISPOSAL SYSTEMS

A. BACKGROUND

Current law is ambiguous in providing a preference to public or private disposal systems. This ambiguity has led to controversy as local governments seek funding and development of solid waste systems. Current law calls for private industry to "...be utilized to the maximum extent possible," while also assigning "primary responsibility" for solid waste management to local government (75-10-102, MCA).

The decision over whether a public solid waste management system should be operated by a local government or a private contractor is becoming increasingly controversial. In an effort to meet EPA standards, local planning is moving as fast as possible and colliding with a rapidly emerging private solid waste industry. Management systems that involve recycling may require increased private sector involvement.

Tradition and current law provide little guidance to local government and private contractors on how to enter into a long-term agreement. Local officials and private contractors are still unsure how their interests and flexibility can be protected in a long-term agreement. Both solid waste contractors and local government officials have been frustrated by the interpretation of state law that sets a five-year limit on contracts to provide private solid waste management services.

B. POLICY OPTIONS

The SWMAC and the EQC considered a number of proposals to provide direction to local officials in making the initial decision of whether a new solid waste management system should be operated by the local government or a private contractor. It is assumed that the process could apply both to collection and disposal. The options considered include:

1. A Formal Local Decision Process. The Department of Health and Environmental Sciences would be provided authority and direction to adopt rules that require all applicants for a solid waste system management license to undertake a formal process to determine if the system is to be publicly or privately operated. The rules would require a public hearing early in the planning process. This process might require soliciting private proposals.

2. Notice of License Application. Applicants for a solid waste license would have to provide notice to the public and

interested private firms that a new solid waste management system was being planned. A public hearing would be required if anyone indicated an interest in private operation of all or a portion of the system. The license application would require that the applicant show that private or public operation was in the best interest of the public if a hearing had been conducted. The applicant would be required to select the private proposal if proposed costs and service levels were substantially equal.

3. Clarify Intent of Current Statute. The current statute would be amended to provide a more clear indication of intent. Potential new language is underlined below:

"75-10-102. Public policies. (1) To implement this part, the following are declared to be public policies of this state: ....

(b) Solid waste management systems shall be developed, financed, planned, designed, constructed, and operated for the benefit of the people of this state.

(c) Private industry is to be utilized to the maximum extent possible in planning, designing, managing, constructing, operating, manufacturing, and marketing functions related to solid waste management systems.

(d) Local governments shall retain primary responsibility for adequate solid waste management with the state preserving those functions necessary to assure effective solid waste management systems throughout the state. Local governments shall have primary responsibility for determining the extent that private industry is utilized in solid waste management systems and shall provide a preference to private industry if costs and services are substantially equal to alternate public services."

C. COUNCIL DELIBERATIONS

The first discussion of this issue by the Solid Waste Management Advisory Committee provided the following general objectives for any changes.

- All costs and services being equal, private contractors should receive a preference;
- Rural areas will require public responsibility;
- Disposal (differentiated from collection) will be largely a public responsibility; and,
- The public versus private management decision process should be a formal process that allows public and private proposals to be compared on a fair and equal basis.

The SWMAC, after much debate, rejected all of the options listed above. Much of the SWMAC discussion focused on two

points: 1) local officials felt they lose control of rates if they rely totally on a private contractor; and, 2) private contractors believe that the current limit of five years for contracts prevents them from providing local governments with good proposals. A compromise was struck by SWMAC that would extend the limit for solid waste contracts beyond five years and would totally remove the "private preference" language from the statute.

While retaining the SWMAC's recommendations to provide for contracts in excess of five years, the Council rejected a repeal of the "private preference" language. After much deliberation and testimony at a series of Council meetings held during the fall of 1990, the Council proposed additional language to clarify the current law.

The proposal would require local governments to provide public notice of proposed new solid waste systems, and to hold a public hearing if interest is expressed in a privately-operated option. Preference would be given to private industry if costs and services are "substantially equal" to alternate public-operated services. The Department of Health and Environmental Sciences would develop criteria on which this determination would be made. This is essentially a combination of options 1 and 3 listed above in the "policy options" section.

One of the concerns the Council was addressing in making this proposal was that there be adequate discussion of the public/private issue at the front end of any solid waste planning process. The Council's proposal would require applicants for a solid waste management facility to document that a procedure established by DHES was followed and that private proposals were given a preference in the planning for the new system.

D. SUMMARY OF COUNCIL RECOMMENDATIONS

The Council's legislative proposal for private vs. public disposal systems is contained in Appendix I. A brief summary of those recommendations follows.

Recommendation #17:

Public notice should be required for proposed new solid waste systems.

Recommendation #18:

If interest is expressed in a privately-owned system, a public hearing should be held at the outset of the process.

Recommendation #19:

The Department of Health and Environmental Sciences should develop a procedure and criteria to compare public and private proposals.

Recommendation #20:

Preference should be given to private industry is costs and services are substantially equal.

SECTION V.

FUNDING FOR THE STATE SOLID WASTE MANAGEMENT PROGRAM

A. BACKGROUND

Funding for state solid waste regulation, planning, and assistance to local governments has declined in the face of new federal requirements. In recent years the primary source of funding for regulation and planning has been the state General Fund. The state's solid waste program was started with federal (EPA) funds and Resource Indemnity Trust Fund interest in the 1970s. In 1981 the federal funding ended. The staff level dropped from 5 to 1.75 fulltime equivalents (FTE) when the program was assumed by the General Fund. In 1989, an additional 1.5 FTE were authorized by the Legislature for the ground water monitoring program, bringing the staffing to its current level of 3.41 FTE.

Only five states in the country have fewer state employees dedicated to solid waste management (HI, UT, ID, NV, SD), while Montana ranks approximately 14th in the number of active landfills. The **average** state expenditure for solid waste programs is $800,000.

The 1992-93 Legislative Fiscal Analyst's proposed annual budget of $184,000 for the solid waste program maintains current funding levels. Current funding levels, however, are inadequate for the Department of Health and Environmental Sciences to adequately implement existing programs and responsibilities. Due to lack of staff, legitimate regulatory control of landfills and other solid waste management systems is effectively non-existant. Reported violations of environmental standards go uninvestigated; unlicensed landfills remain open; and, annual inspections occur only every couple years. Further, the department has not been able to process the growing number of applications for solid waste licenses for new facilities, just when prompt service is essential due to the impending Subtitle D regulations.

Additional funding and staff are necessary for the state to maintain primacy over the solid waste program. Solid waste program staff estimate that a minimum of three additional FTE will be required in order to adopt a federally approved Subtitle D program. Additional staff are also needed if the department is to effectively regulate and manage the importation of solid and infectious waste. In the last year, the department has received license applications for two incinerators that will dispose of out-of-state infectious waste, and two separtate proposals have emerged for mega-landfills that would import solid waste.

B. POLICY OPTIONS

The SWMAC considered the following options for state funding:

1. Per Ton Fee. The state fee per ton of disposal is the most direct way of relating the revenue to the amount of service consumed. The fees charged by other states vary widely from 50 cents to $10 per ton. In terms of administration, this fee would require some new collection mechanism and may not be the most "tax efficient" to collect. Not all facilities currently weigh solid waste; however, Oregon (at 50 cents/per ton) has a method for estimating volume for small facilities. If it is assumed that Montana annually produces 552,780 tons of solid waste, a fee of 90 cents per ton would be required to generate $500,000, if this was the only new fee.

2. Permit and Application Fees. Montana currently charges no application or permit fee. In order to provide an ongoing source of revenue any permit fee would have to be on an annual basis. A permit fee may become the method of enforcing the collection of most types of surcharge. In other words, the permit fee could be based on tons or households, but enforced by withholding the permit. The other potential method of collection would be direct state collection through the income or property tax system.

A simple permit fee could leave the option to the local government on how to raise the money. Montana currently has 112 licensed landfills. A flat minimum fee of $4,464 would produce $500,000. If the number of landfills decreases as a result of increased federal regulations, as is expected, a larger fee would be required. A flat fee would be efficient to collect and enforce.

3. Tipping Fee Surcharge. The tipping fee surcharge would impose a state surcharge on all tipping fees collected by local governments. Not all local governments raise revenue for solid waste systems through tipping fees. This system would be moderately efficient in that it would use the local revenue collection system where tipping fees are used. A surcharge would be less "tax effective" than the per ton charge in that it has little relation to volume.

If a tipping fee or similar method were used that imposed a flat rate on each consumer, the potential revenue could be estimated from the number of households. Based on 305,000 households state wide, and assuming some avoidance of the fee, a flat rate of approximately $1.64 would be required to produce $500,000.

A surcharge could be based on a percentage of local revenues. Assuming some uniformity of local fees, this method would more effectively link consumption of service to cost. The Department of Revenue estimates that local government collections, excluding local general tax dollars, were $6,989,000 in the most recent tax year. Using an estimate of $8,000,000 for all local revenues for solid waste, a surcharge of 6.25 percent on local fees would produce $500,000. In order to use a tipping fee surcharge the legislature might be required to dictate some uniformity in how local governments raise revenue for solid waste services.

4. Disposal Fees. Ten states have special fees for disposal of "problem" waste products. According to the Congressional Research Service, the most common fee is for tires, and generally is $1 per tire. In Minnesota and Wisconsin, the tire fee is assessed as a part of vehicle registration fees. The 1976 "State Solid Waste Management Strategy" estimates that Montana disposes of 680,000 tires each year. If a fee on tires were collected, some special recycling or disposal services would need to be funded to dispose of used tires. A fee on new tires would require a new collection system and would not be efficient. A fee collected with auto registration could be collected with the current collection system.

5. Local Option Method. The Department of Health and Environmental Sciences could be authorized to establish two or three methods of imposing the fee in rules, all directed at producing the same amount of revenue in relation to the amount of service provided. For example, a flat permit fee could be supplemented by a tipping fee or a per ton charge as selected by the local government unit. The fees would be based on a schedule to produce equal revenues for relatively equivalent volumes of solid waste.

C. COUNCIL DELIBERATIONS

The initial discussion by the SWMAC related to whether funding should come from consumer fees (enterprise basis) or general tax revenue (public health basis.) Alternative financing of solid waste, as opposed to general tax support, is provided by 31 states and The District of Columbia, according to the Congressional Research Service. The most common source of revenue is a surcharge on local waste disposal (23 states). The direction provided by the Advisory committee was as follows:

- Direct services (collection and disposal) should be funded by direct fees;
- Costs of monitoring and planning should be related to volume regulated;

- Licensing should be a flat rate; and,

- Some funding is the responsibility of all citizens.

In considering new revenue sources, the SWMAC considered the measures "tax efficiency and tax effectiveness". Tax efficiency indicates how difficult or expensive collection of the tax may be. Tax effectiveness measures how effective the tax is in taxing those who should be paying for the service. Tax effectiveness relates to other public policy. For example, if the goal is to have those who produce more solid waste pay more, an effective tax would have rates increase with the volume of waste.

The Advisory Committee finally decided that the burden of any new source of revenue should be placed upon those who receive service from the state solid waste program. For purposes of comparison, funding of $500,000 per year for the state program was assumed. It was also assumed that some funding would continue with general tax dollars. The funding level was later increased by the Council, as the needs of the solid waste program were presented. The Council felt it was important that the funding level be adequate to insure timely review and to provide technical assistance where needed.

In reviewing the options, the EQC agreed that any funding system should reflect the following:

- fees should reflect volume of solid waste;

- the cost to the state of reviewing applications and completing the annual licensing process;

- some incentive for waste reduction; and,

- some incentive for consolidation of small systems.

Staff of the Department of Health and Environmental Sciences presented a budget for the solid waste program that would provide support staff for additional review and inspection, implementation of Subtitle D regulations, and implementation of other solid waste programs being proposed by the Council (e.g., integrated waste management household hazardous waste). This proposal would increase the division's staffing from the current level of 3.41 FTE to 13 FTE at full implementation, and in FY 93 would require funding of approximately $614,000. Total additional revenue required above the General Fund amount of $184,000 would be approximately $429,000. The Council has supported this proposed budget. A description of the proposed budget is included in Appendix K.

The Council also recommended a fee system structure that combines annual permit (or licensing) fees, application fees for new landfills, and a per ton, volume-based fee. The annual and application fee amounts represent estimates of actual review costs as provided by the solid waste program; however, the final proposal was modified somewhat to reduce the impact on smaller operators. The per ton fee reflected the desire of the Council to have the fee structure incorporate the capacity of the facility being regulated and to encourage the reduction of volume in accordance with other Council objectives. In order to simplify the administration of the fee system, standards for estimating volume at sites that do not use scales were included as well as conversions for weight and volume.

The fee proposal and the estimated associated revenues are outlined in **Table 1** below. A major facility is defined as having a planned capacity of 25,000 tons per year; an intermediate facility would have in excess of 5,000 tons per year but less than 25,000; and a minor facility would have less than 5,000 tons per year.

Table 1. Fee and Revenue Assumptions

- o There are 552,780 Tons of trash disposed of annually;
- o There will be 70 licensed landfills during the next biennium with the following "base" license fees:

- 8 Major Facilities @ $3,500 =	$28,000	
- 20 Intermediate Facilities @ $3,000 =	60,000	
- 42 Minor Facilities @ $2,500 =	105,000	
Total=		$193,000

- o A "volume" fee of $.31 per ton will generate: $171,362
- o There will be 10 new applications each fiscal year generating the following application fees:

- 1 Major Facility @ $10,000 =	10,000	
- 4 Intermediate Facilities @ $7,500 =	30,000	
- 5 Minor Facilities @ $5,000 =	25,000	
Total		65,000
Total Fee Revenue:		**$429,362**

NOTE: The number of new landfills for which applications will be received, and the total number of landfills that will be licensed annually, were estimated by the

Department of Health and Environmental Sciences. An assumption has been made that the new Subtitle D regulations will result in the closure of many existing landfills and the consolidation to fewer and larger disposal facilities.

D. SUMMARY OF RECOMMENDATIONS

The Council's legislative proposal for funding the state's solid waste management program is contained in Appendix J. A brief summary of those recommendations includes:

Recommendation #21:

The solid waste program should be funded by a combination of continued support from the General Fund and user fees.

Recommendation #22:

The user fee should be collected through a requirement for an operating license from the Department of Health and Environmental Sciences.

Recommendation #23:

The annual license fee should include:

* **a base rate component;**
* **a component based on the volume of waste being disposed; and,**
* **a fee for review of new license applications.**

Recommendation #24:

The recommended annual funding level for the FY 92 and FY 93 solid waste program is $614,000, with a total staff at full implementation of 13 FTE.

SECTION VI.

LOCAL GOVERNMENT ASSISTANCE

A. BACKGROUND

State and federal solid waste management policies require local governments to make a substantial capital investment in equipment, facilities and monitoring. The issue the Council addressed concerned the extent to which the state should provide funds or assist local governments in raising the needed capital. Authority already exists for a loan program through the DHES, however, the program has had no funding in recent years.

Statutory authority for local governments to provide solid waste services is currently fragmented and different parts of the law are inconsistent.

B. POLICY OPTIONS

The options discussed were not alternatives, but rather a list of potential legislation that would assist local financing:

1. Update Local Government Solid Waste Laws. Current laws should be updated to provide cities, counties and solid waste districts with authority and procedure to issue revenue bonds and to enter into other common financing arrangements. Districts need to be clearly provided with status to obtain tax exempt financing. The law providing for makeup of a district board of directors as well as the process for creating districts needs to be reviewed in light of recent efforts to develop multi-county districts. The procedure for setting rates needs to be reviewed in relation to multi-county districts.

2. Guarantees for Local Bonds. Because solid waste revenue bonds are new in Montana, and because entities that may want to issue the bonds are in many cases going to be new, the ability to obtain good rates for tax exempt financing could be enhanced by a state guarantee program. A state guarantee would provide the greatest leverage for state funds if the state is not planning to directly share in the cost of developing new facilities. This guarantee could also be provided through a limited pledge of local property tax revenue.

3. Provide Funding for the State Loan and Grant Program. The Department of Health and Environmental Sciences currently has authorization for a loan and grant program. A grant program could particularly be useful in providing an incentive to encourage planning consistent with state policies. The loan program would be useful for small projects for which tax exempt financing would not be cost effective.

4. Closure Assurance Funding. If local governments are required to assure monitoring and maintenance following closure by setting funds aside, state assistance or assurances may be helpful. This issue needs to be explored after the Subtitle D regulations are released. The costs for this requirement may potentially be reduced through pooling funds or state assurance.

C. COUNCIL DELIBERATIONS

In the initial discussion of this issue, the SWMAC indicated that state laws should be updated to provide local governments clear direction and authority to obtain financing. Also, the SWMAC indicated an interest in programs that would provide financial assistance or guarantees for local projects.

One issue discussed was whether state assistance should be tied to conforming with state policy. In other words, should the state give priority to local governments that follow state policies or priorities?

Criteria were proposed that could be used for evaluating financing options:

- Least cost to local government units;
- Support of a regional concept;
- State assistance tied to conforming with state policies; and,
- State assistance requiring fair examination of local options.

The Council agreed that several substantive and technical changes should be made to enhance the flexibility of local governments to meet their funding and organizational needs. Most of the changes enhance or clarify existing statutory language, much of which has not been updated in many years and has become obsolete or conflicts with other provisions of state law.

The Council also agreed that additional flexibility was needed in the ability of local governments to charge for services so that fees could more accurately reflect the cost of service.

Funding for a state loan and grant program was considered desirable, but the Council questioned whether the Legislature would authorize appropriations given the current demands on State revenues. Therefore, no specific recommendation was made with regard to this program.

D. SUMMARY OF COUNCIL RECOMMENDATIONS

The Council's legislative proposal for a general revision of local government laws related to solid waste is contained in Appendix L. A brief summary of those recommendations is as follows:

Recommendation #25:

Solid Waste Districts should be able to issue limited tax-backed revenue bonds.

Recommendation #26:

Municipalities and counties should be provided clear authority to issue bonds.

Recommendation #27:

The authority of local governments to determine the method of collecting fees should be more flexible.

Recommendation #28:

Current statutory language relating Refuse Disposal Districts and Garbage and Ash Collection Districts should be consolidated and made consistent with the definitions and the use of the term "solid waste management" in public health statutes.

Recommendation #29:

Statutes should be clarified to allow access to Board of Investment Programs.

Recommendation #30:

Counties should have clear authority to pledge solid Waste District income to bonds.

SECTION VII.

INFECTIOUS WASTE MANAGEMENT

A. BACKGROUND

Infectious waste is defined by the U.S. Environmental Protection Agency as "waste capable of producing an infection." Wastes capable of producing infection are generally considered to include pathological waste, blood and blood products, contaminated sharps (e.g. needles, blades, scalpels), and microbiological wastes (e.g. cultures and stocks). Major generators of infectious waste include hospitals, and physician, dental and veterinary clinics.

In Montana, it is uncertain how much infectious waste is produced each year. However, there may be 250-300 businesses in the state that produce some material that could be considered infectious. While the absolute quantities produced by these generators remains unknown, the Billings Gazette recently estimated that St. Vincent Hospital in Billings produces about 15,000 pounds of infectious waste per week. A 1989 survey by the Montana Hospital Association provides some insight as to how infectious waste is disposed of in Montana. Of the 44 member hospitals that responded, twenty-nine had incinerators; eleven primarily relied upon landfills for infectious waste disposal; and, others used autoclaves to steam sterilize waste.

1. State Regulation

Montana is one of a handful of states that has not enacted legislation on infectious waste management. State solid waste regulations define three classes of waste: class I solid hazardous wastes are defined by EPA; class II mixed solid waste; and, class III wood wastes. Under this classification system, hospital and medical facility wastes are classified as a class II mixed solid waste and may be landfilled "provided that infectious medical wastes have been sterilized or safely contained to prevent the danger of disease" (ARM 16.14.503). The qualification in the definition of class II wastes would seem to suggest that infectious waste that has not been sterilized, or sharps that have not been contained in puncture resistant containers, cannot be landfilled as a class II waste. In practice, however, the landfilling of untreated waste is a standard disposal practice.

2. Federal Regulation

Regulations promulgated under the Occupational Safety and Health Act provide the only - albeit indirect and general -

federal regulatory standards for infectious waste. The purpose of the Occupational Safety and Health Act is to:

> "assure so far as possible every working man and woman in the Nation safe and healthful working conditions and to preserve our human resources ...."

The Act places the burden of responsibility for achieving this goal upon employers who are required to furnish to each employee:

> "... employment and a place of employment which are free from recognized hazards that are causing or likely to cause death or serious physical harm ..."

The Occupational Safety and Health Administration (OSHA), a division of the Department of Labor, is the agency responsible for implementing the Act. OSHA has promulgated general standards, intended to apply to every worker in every workplace, as the primary means of achieving the goal of the Act. As general standards, these do not - and are not intended - to specifically address the management of infectious waste. However, to the degree that infectious waste presents an occupational health hazard, OSHA standards apply to the specific case of workers (refuse, health care or other) who come into contact with infectious waste through the course of their employment. OSHA currently is developing regulations specifically to protect health care workers from occupational exposure to blood-borne diseases. These may be promulgated in the next year.

The EPA has authority under the Resource Conservation and Recovery Act to regulate the handling, storage, treatment, transportation and disposal of infectious waste. To date, however, the agency has only issued voluntary guidelines. Many observers believe that this may soon change.

3. Technologies for Disposal

a. Untreated Landfilling

The potential for injuries, infection or disease from contaminated sharps is the greatest issue surrounding the disposal of untreated infectious waste in landfills. Specifically, the major concern is for the potential for transmittal of hepatitis, AIDS or other infections to health care providers, laundry workers, hospital technicians, refuse workers, the general public or others who may come in contact with infectious waste.

In order for a communicable disease (e.g., AIDS, hepatitis) to be infectious, four factors that must be present:

- virulence; microorganisms capable of causing disease must be present;

- dose; microorganisms must be present in a quantity sufficient to cause disease;

- portal of entry; there must be an opening or route of access into the human body; and

- host susceptibility; the host's natural resistance must be incapable of preventing infection.

Each of these four conditions must exist in order for an individual to become infected with a communicable disease. Statistics suggest that this is an unlikely event. The U.S. Department of Health and Human Services, while concluding that public health concerns exist for selected occupations involved with medical waste, has estimated that the likelihood of AIDS or hepatitis being transmitted from sharps is low. According to their estimates, which are based upon injury rates, a maximum of approximately 162-325 hepatitis infections related to medical sharps could occur annually in the United States. This amounts to between 0.05 - 0.1 percent of the total number of annual hepatitis infections. In the case of AIDS, the estimate is even lower: a maximum of between less than one to four cases per year associated with medical sharps.

b. Incineration

Incineration is the most common method of disposing of infectious waste. Nationally, the EPA estimates that about 80 percent of all hospital waste is incinerated.

The incineration of infectious waste has many of the same advantages and disadvantages that are associated with incineration of municipal solid waste. The advantages include volume reduction of the waste, and the need for minimal processing of the waste prior to disposal. Disadvantages include high costs and the potential for pollution.

While limited data exist, hospital incinerator emissions tend to contain greater concentrations of dioxins and furans (a toxic compound derived from plastic) per gram of waste burned than do municipal solid waste incinerators. According to the Congressional Office of Technology Assessment, these higher concentrations may be attributable to:

- The frequent start-ups and shut-downs that may lead to increased dioxin formation and may volatilize certain waste components;

- Less stringent emission controls;

- Poorer combustion controls (e.g., waste mixing and oxygen controls); and,

- Differences in waste composition as compared to municipal solid waste (e.g., 2-4 times as much plastic).

While hospital incinerators produce greater concentrations of some contaminants, given the smaller volume of hospital waste incinerated, the U.S. Congressional Office of Technology Assessment says that overall emissions from all medical waste incinerators are less than those from other incinerators. However, where hospital incinerators are located in densely populated areas, potential exposure may be greater.

Little data exist that describe the concentrations of heavy metals and other constituents in incinerator ash. As with incinerator emissions, however, higher concentrations of dioxins have been found in samples of incinerator fly ash. Because heavy metals (e.g., lead and cadmium) have been found in incinerator emissions, they are probably also present in incinerator ash.

Unfortunately, few risk assessments have been performed on hospital incinerators. Therefore, it is difficult to determine the degree of risk associated with incineration relative to other sources.

c. Autoclaving and Landfill

Autoclaving, or steam sterilization, is a process to sterilize infectious wastes prior to disposal in a landfill. Typically, bags of infectious waste are placed in a chamber where steam is introduced for 15 to 30 minutes. Steam temperatures are maintained at 250 degrees fahrenheit, long enough to kill pathogens. The waste is then transported to a landfill for disposal.

Several factors may influence the effectiveness of autoclaving as a sterilization method, including the type of container, and the volume and density of material. Also, proper operation, regular maintenance and repair are essential to insuring complete sterilization. Some landfills no longer will accept autoclaved waste because managers question whether the waste has actually been treated.

B. COUNCIL DELIBERATIONS

In developing infectious waste legislation, the Environmental Quality Council relied upon the recommendations of the Coalition for Infectious Waste Management. The Coalition is an industry-sponsored group, formed for the purpose of developing and implementing infectious waste management policies that are

reasonable, cost-effective, aesthetically pleasing and environmentally acceptable.

Through the course of several meetings and presentations by infection control praticioners, Council members became convinced that the actual health and environmental risks associated with infectious waste are relatively limited. The real issue, it seems, is one of public confidence and perception. Probably largely due to hysteria about AIDS, there is a public stigma surrounding infectious waste that exceeds the genuine risk of infection. A second issue is the potential importation of infectious waste from other states to Montana for disposal. This threat probably stems from the absence of state regulations that make disposal in Montana less expensive than elsewhere. While the public health concerns and environmental risks are probably negligible, members of the Council and Coalition agreed that the public confidence issue and the threat of importation were significant enough to warrant action.

The Coalition for Infectious Waste Management drafted a set of voluntary guidelines for the management of infectious waste and presented them to the Council for review. The Council indicated that the guidelines were thorough and complete, but expressed concern that, without mandatory requirements, the state would not have the ability to effectively regulate the importation of infectious waste. It was also felt that while infectious waste is probably not a severe health risk, regulations may be necessary to placate public concern. Upon request by the Council and after further discussion, the Coalition agreed to support a legislative proposal to make the guidelines mandatory. The ensuing draft legislation is contained in Appendix M.

C. SUMMARY OF COUNCIL RECOMMENDATIONS

The Environmental Quality Council proposed the following recommendations for infectious waste management.

Recommendation #31:

Standards should be established for waste management, including separation, containment, storage, transportation, handling and disposal.

Recommendation #32:

Landfilling of untreated infectious waste would be prohibited in April of 1993.

Recommendation #33:

Responsibility for licensing and regulation would be placed with the respective boards or agencies that license professions, occupations or health care facilities.

SECTION VIII.

HOUSEHOLD HAZARDOUS WASTE

A. BACKGROUND

Household hazardous wastes (HHW) are discarded products that contain potentially toxic substances. While often stored over long periods in the home, and safe if used properly, they are a major source of toxicity in the waste stream. HHW generally includes cleaning products, home maintenance products (e.g., paint thinner, varnish, glue), automobile products (e.g., oil, anti-freeze), personal care products, and yard maintenance products (herbicides and pesticides).

1. How Much HHW Do Montanans Generate

Several studies have looked at the amount of household hazardous waste generated from a single family dwelling. Most studies have reached similar conclusions: That HHW comprises less than one-percent of the solid waste stream. It is unknown how much household hazardous waste is produced in Montana each year. However, conservatively assuming that 0.2 percent of state's solid waste stream is HHW (based upon generation rates found in studies), it can be estimated that Montanans discard about 1,200 tons of household hazardous waste annually. Given the rural and agricultural nature of Montana, this estimate may be low.

2. Is the Disposal of HHW Regulated

The disposal of household hazardous waste is not regulated. Under both Montana and federal law, household generators of hazardous waste are exempt from the disposal requirements and regulations that apply to other types of hazardous waste generators. Further, small quantity generators - those who produce less than 220 lbs. of hazardous waste a month - also are not regulated. It is legal under both federal and state law for household and small quantity generators to dispose of hazardous waste in landfills.

3. What Are the Common Disposal Practices

Experts say that the one safe and proper disposal method for household hazardous waste is a licensed hazardous waste disposal facility. The cost of such disposal, however, is prohibitively expensive (up to several hundred dollars for a 55 gallon drum). Additionally, the state does not have a disposal facility; all hazardous waste produced in Montana is currently shipped out-of-state for disposal. While data are not available, it is probably safe to assume that very few people in the state, if any, dispose

of their household quantities of hazardous waste at a licensed facility.

How, then, is household hazardous waste disposed of? In practice, three disposal methods are common: pour it down the drain, dispose of it in a landfill, or dump it on the ground. None of these practices are a preferred method of disposal, and each potentially contributes to ground or surface water contamination.

a. Landfilling

Landfilling is probably the most common disposal method. In the process of landfilling, HHW containers are often perforated by trash compactors or heavy equipment, releasing their contents into the waste stream. Chemicals, paints, solvents, etc. may then leach from the landfill, contaminating groundwater. One method used to limit the potential for groundwater contamination is to solidify liquid HHW in cement blocks or vermiculite prior to landfilling.

b. Sewer System

Household hazardous wastes may also be poured down the kitchen drain. As these substances drain into septic tanks, they can kill the microorganisms that are essential to the systems' operation. They may also seep into groundwater. In addition, hazardous waste substances that flow into sewer systems may eventually be released into surface waters as effluent.

c. Dumping

Dumping HHW on the ground can contaminate soil and eventually may seep into groundwater that is used for drinking water supplies. It may also run off directly into surface waters.

B. COUNCIL DELIBERATIONS

The Council's initial discussion of household hazardous waste focused upon the lack of a reliable source of information on constructive steps that citizens can take to reduce the toxicity of the waste stream. Examples of such steps include purchasing alternative products that are more benign; purchasing only as much of a product as is needed; allowing substances like paint to dry before disposing of it; methods of making liquids inert; knowing which chemicals may be safely mixed, etc. The Council's recommendations are intended to provide communities, groups and individuals with the assistance and information necessary to reduce the amount of household hazardous waste entering the landfills.

Council members felt that while the informational and assistance programs are a significant first step, some sort of systematic collection program is also needed. Members felt that helping citizens to generate less HHW is not enough; some HHW always will have to be disposed of, and currently, neither the public nor private sectors in the state are providing citizens with a convenient mechanism to properly dispose of household hazardous waste. The Council considered several options for disposal programs, including:

- Developing a grant program for communities or the private sector to develop HHW collection and exchange programs;
- Directing and funding the Department of Health and Environmental Sciences to develop a onetime "amnesty" collection program; and,
- Funding a statewide HHW collection program.

To evaluate the feasibility of various household hazardous waste collection programs, and the feasibility of a joint public-private collection program, the Council requested the assistance of Special Resource Management, the DHES, Browning-Ferris Industries, Waste Management, Inc., and the Montana Solid Waste Contractors Association. These groups all testified at meetings in October and November 1990.

In the end, the Council decided to take no action in the development of a HHW collection program. It was felt that a collection program, while desirable, was too expensive to fund at this time.

C. SUMMARY OF COUNCIL RECOMMENDATIONS

The Environmental Quality Council's recommendations on household hazardous waste are as follows:

Recommendation #34:

The Department of Health and Environmental Sciences should develop a technical assistance program to aid local governments and the private sector in developing hazardous waste collection and exchange programs.

Recommendation #35:

The Department of Health and Environmental Sciences should serve as a clearing house for information on chemical compatibility and on alternatives to the use of products containing hazardous and toxic materials.

Recommendation #36:

The Department of Health and Environmental Sciences and the Office of Public Instruction should jointly develop a school curricula on hazardous waste reduction for grades K-12.

SECTION IX.

WASTE OIL

A. BACKGROUND

Waste oil is any used oil that has been refined from crude oil, used, and as a result of such use has been contaminated by physical or chemical impurities. Examples of used oils include spent automotive lubricating oils, transmission fluid and brake fluid; spent industrial oils including compressor, turbine and bearing oils, hydraulic oils, refrigerator oils and railroad draining; and, spent industrial process oils.

State officials estimate that approximately 2.2 million gallons of used oil is produced annually in Montana, 84 percent of which is generated by very small quantity generators (those who produce less than 220 lbs. per month). When disposed of improperly, these oils may contaminate ground and surface waters, making them unfit for human use and affecting fish and wildlife populations.

1. How is Waste Oil Regulated

Waste oil is regulated in some circumstances by both federal and state law. Federal regulations govern the burning of waste fuel, specifying the classes of oil and types of combustion equipment that may be used, and emission standards. As of 1990, federal regulations prohibit the use of waste oil, in most instances, as a dust suppressant on roadways. Finally, state environmental regulations prohibit the contamination of surface and ground waters by oil.

2. What are the Disposal Options for Waste Oil

Disposal options for waste oil include recycling (both burning and re-refining) and landfilling. Each of these options is discussed below.

Recycling - Re-refining. There are a number of used oil recycling collectors operating in the state; about 45 percent of the waste oil generated in Montana is recycled. However, due to the relatively low price of virgin oil and the costs of recycling, most collectors charge 20 - 25 cents per gallon to recycle oil. The recycling process yields about 2.5 quarts of useable oil and 1.5 quarts of by-product sludge per gallon recycled. The sludge generally must be disposed of as a hazardous waste.

Recycling - Burning. Another method of recycling oil is by burning. About 22 percent of the waste oil generated in Montana

is burned, primarily in heating furnaces. A person may burn oil he either produces himself or receives in small quantities directly from do-it-yourself oil changes. However, oil in quantities greater than several gallons may not be received except by registered "used oil marketers." A 1987 consultant's report to the DHES recommends individual use of used oil heaters as the most economical option for disposing of waste oil.

Landfilling. About 11 percent of the waste oil generated in Montana is landfilled. While landfill disposal of small quantities of oil that has not been contaminated with hazardous waste is legal, many landfills refuse to accept oil because operators feel that the risk of pollution is too great. Landfills that do accept used oils typically require the oil to be mixed with sand, sawdust or vermiculite to remove all free liquids.

B. POLICY OPTIONS AND COUNCIL DELIBERATIONS

The Council considered an option to direct and fund DHES to develop an oil collection program at municipal landfills for do-it-yourself oil changers. This option was rejected. While Council members thought a collection program was desirable and needed, they decided it would be costly to implement. As a policy decision, they decided that scarce financial and human resources would be better spent on other aspects of solid waste management, such as developing an integrated waste management program.

The two recommendations that the Council adopted are intended to make it easier for the people who wish to properly dispose of waste oil to do so. According to the Department of Health and Environmental Sciences, relative to other special wastes such as household hazardous waste, disposal options other than landfilling already exist and are being used for oil. The Council felt that recommendations for a recycling awareness program and the display of signs in retail outlets encourages people to properly dispose of waste oil while using the existing recycling industry.

C. SUMMARY OF COUNCIL RECOMMENDATIONS

The Environmental Quality Council's proposed legislation for waste oil is contained in Appendix N. A summary the Council's recommendations follows:

Recommendation #27:

Direct and fund (as funds become available) the Department of Health and Environmental Sciences to develop an oil recycling awareness program.

Recommendation #38:

Require oil retailers to visibly display at a prominent place within the store a sign indicating the location of the nearest waste oil collector. A general sign for this purpose is to be developed and distributed by the department as part of its recycling awareness program.

SENATE JOINT RESOLUTION NO. 19

INTRODUCED BY STORY, KEATING

A JOINT RESOLUTION OF THE SENATE AND THE HOUSE OF REPRESENTATIVES OF THE STATE OF MONTANA DIRECTING THE ENVIRONMENTAL QUALITY COUNCIL TO STUDY THE REGULATION AND MANAGEMENT OF SOLID WASTE AND RELATED EFFECTS ON GROUND WATER QUALITY AND AIR QUALITY; AND REQUIRING THE ENVIRONMENTAL QUALITY COUNCIL TO REPORT ITS FINDINGS AND RECOMMENDATIONS TO THE 52ND LEGISLATURE.

WHEREAS, the 51st Legislature has considered many complex bills relating to the regulation and management of solid ~~and--related--liquid~~ wastes, including landfill regulation and associated ground water monitoring, infectious waste disposal, WASTE INCINERATION AND INCINERATOR EMISSIONS, and fee structures and funding mechanisms for solid waste management programs; and

WHEREAS, the United States Environmental Protection Agency has recently released proposed minimum federal regulations for landfills, prompted by studies that demonstrated significant nationwide ground water pollution caused by substances leaching from landfills; and

WHEREAS, these proposed regulations, if adopted as drafted, would have major effects on the management of solid wastes in Montana, since ~~both~~ MONTANA HAS NOT APPLIED the technical and financial resources ~~to--respond--are--severely inadequate~~ NECESSARY TO ENSURE THAT SOLID WASTE MANAGEMENT IS COMPATIBLE WITH THE PUBLIC HEALTH, SAFETY, AND WELFARE AND THE ENVIRONMENT; and

WHEREAS, out-of-state waste disposal interests are increasingly investigating Montana as a potential site for disposal of waste generated outside Montana's borders; and

WHEREAS, there are currently ~~no~~ FEW state regulations ~~or~~ AND LITTLE oversight of the importation of solid waste into Montana; and

WHEREAS, THE BURNING OF PLASTIC AND OTHER MATERIALS IN SOLID WASTE INCINERATORS IS A SOURCE OF TOXIC AIR POLLUTANTS WHICH, DESPITE THEIR ADVERSE EFFECTS ON HUMAN HEALTH AND THE ENVIRONMENT, ARE POORLY UNDERSTOOD AND LITTLE REGULATED BY THE STATE OR FEDERAL GOVERNMENT; AND

WHEREAS, MONTANA STATUTES PRESENTLY EXEMPT FROM LICENSING CERTAIN PRIVATELY OWNED LANDFILLS, AND THIS EXEMPTION PROVIDES A SIGNIFICANT GAP IN OUR ABILITY TO ENSURE THAT SOLID WASTE MANAGEMENT ADEQUATELY PROTECTS THE PUBLIC HEALTH, SAFETY, AND WELFARE AND THE ENVIRONMENT; AND

WHEREAS, opportunities exist to explore new methods of integrated waste management, including waste minimization, SOURCE SEPARATION, recycling, incineration, and other innovative techniques; and

APPENDIX A

WHEREAS, financing strategies for continued, improved, and cost-effective management of solid ~~and related liquid~~ wastes must be explored to effectively respond to increased federal activity and needed changes to protect the health and environment of Montana citizens.

NOW, THEREFORE, BE IT RESOLVED BY THE SENATE AND THE HOUSE OF REPRESENTATIVES OF THE STATE OF MONTANA:

(1) That the Environmental Quality Council be directed to give priority to and study the regulation and management of solid ~~and related liquid~~ waste and its effects on ground water quality.

(2) That the study include ~~investigation and oversight~~ REVIEW of:

(a) the effects on Montana communities of the proposed federal regulation of landfills;

(b) programs to regulate the disposal of infectious waste in Montana;

(c) regulation of the importation of solid waste into Montana;

(d) ~~monitoring of~~ actual and potential ground water pollution resulting from solid waste disposal;

(e) new opportunities for waste minimization, SOURCE SEPARATION, recycling, incineration, and integrated waste management;

(f) ~~financing~~ strategies for DEVELOPING AND FINANCING the most cost-effective AND ENVIRONMENTALLY SOUND federal, state, local, and private response to MONTANA'S solid waste management needs; ~~and~~

(g) the integration of solid waste management programs with other ground water protection programs;

(H) DIFFERENCES IN THE REGULATION OF PUBLIC AND PRIVATE LANDFILLS, INCLUDING THE EFFECTS ON THE PUBLIC HEALTH, SAFETY, AND WELFARE AND THE ENVIRONMENT OF THE EXISTING EXEMPTION FROM LICENSING FOR CERTAIN LANDFILLS; AND

(I) THE EFFECTS OF SOLID WASTE INCINERATION ON MONTANA AIR QUALITY AND PUBLIC HEALTH.

(3) That the Environmental Quality Council consult with federal, state, and local officials, ~~regulated~~ industries, ~~interested~~ citizens, and other persons or groups with expertise in the regulation of solid waste.

(4) That the Environmental Quality Council report its findings and recommendations to the 52nd Legislature by November 1, 1990.

-End-

Appendix B

MEMBERS OF THE SOLID WASTE MANAGEMENT ADVISORY COMMITTEE

Fran Amendola
Soil Scientist
Spring Creek Coal Company
Decker, MT

Max Bauer, Jr.
District Manager, Vice-President
Browning-Ferris Industries of Montana, Inc.
Missoula, MT

Senator Tom Beck (Chair)
Environmental Quality Council
Deer Lodge, MT

Carlo Cieri
Park County Commissioner
Livingston, MT

Clark Cleveland
Valley County Refuse District
Hinsdale, MT

Doug Crandall
Environmental Quality Council
Livingston, MT

Barry Damschen
Damschen & Associates
Helena, MT

Rep. Jerry Driscoll (Vice Chair)
Environmental Quality Council
Billings, MT

Don Felstet
Felstet's Disposal Services
Superior, MT

Gerald Gaston, President
Gaston Engineering and Survey
Bozeman, MT

Tony Grover
Solid and Hazardous Waste Bureau
MT Department of Health and Environmental Sciences

Helena, MT

Tom Hammerbacker, Mayor
City of Conrad
Conrad, MT

Jimmy Johnston
Department of Public Works
Butte-Silver Bow
Butte, MT

Christine Kaufmann
MT Environmental Information Center
Helena, MT

* Jim Leiter
Solid and Hazardous Waste Bureau
MT Department of Health and Environmental Sciences
Helena, MT

Will Selser, Director
Lewis and Clark County Health Department
Environmental Division
Helena, MT

Erl Tufte
Department of Public Works
City of Great Falls
Great Falls, MT

* Mr. Leiter is now with Browning-Ferris Industries in Missoula

Appendix C

SURVEY OF INTEGRATED WASTE MANAGEMENT PROJECTS IN MONTANA

ESTABLISHED PROJECTS

BIG FORK - A local individual started an organization called the National Association of Dumpster Divers and Urban Miners or NADDUM. NADDUM publishes a bi-monthly news letter dedicated to informing people of creative waste disposal alternatives on a local level and keeping them informed of solid waste issues on a broader level.

BILLINGS - Over the last ten years, a local volunteer group has sponsored a program to buy trees through recycling revenues. The program is called Trash For Trees, and with it, Billings has raised about $50,000 since 1980. Every so often, on a specified day, a well advertised collection campaign is undertaken and all proceeds go to a fund for buying live trees for planting around town.

MALSTROM AIR FORCE BASE - About two years ago the base implemented a household pickup service for the entire base in order to collect recyclables to raise money for recreational activities. Because of the drop in most commodities markets, they decided to continue collecting only aluminum and computer paper.

MISSOULA - In September 1989, concerned citizens formed Recycle Missoula, a non-profit, volunteer organization working to educate people about solid waste issues and to provide alternatives to landfilling. Currently, the group has about 50 members involved in several projects associated with recycling.

Recycle Missoula provides curbside pickup of recyclables to about 5000 households in various parts of town. They collect aluminum, glass, paper, cardboard, magazines, tin cans and plastic milk jugs.

In addition to its recycling efforts, Recycle Missoula has developed a very extensive education program including curriculum for every grade level, an informational slide show, and many well-spoken people willing to present public programs on recycling. In April, the group built two recycling drop off boxes and placed them downtown. The boxes have been a great success and have provided a needed service. Recycle Missoula continues to grow and expand its programs and services.

VICTOR - One of the truly bright spots for solid waste management in Montana has been developed in Victor. Bitterroot Disposal

began in the 1970's as a regular garbage pickup service. In early 1990, the company decided to make some major changes. The local landfill will be closed in October and since the nearest landfill is in Missoula, they wanted to find a way to reduce the amount of waste that would have to be shipped to Missoula. The company decided to borrow enough money to design and build a materials recovery facility or MRF.

The idea is simple. Municipal and commercial waste gets picked up as usual with the regular trucks and is then delivered to the new facility and dumped on to a conveyer belt. As the waste moves along, workers sort glass, aluminum, newsprint, cardboard, steel and some types of plastic and throw these into large containers. When the containers fill, glass is crushed and put in shipping containers and the other materials are baled with a large hydraulic baler. Whatever is left over (mostly paper, plastic bags, food waste and yard waste) is baled and sent to the landfill.

Recyclable materials are stored until there is enough to fill a semi-trailer and is then sold to a recycler. By sorting, the volume of waste sent to the landfill is reduced by about 40 percent. The key to making this operation economical is in the amount of money the company can save by <u>not</u> having to pay for shipping and landfilling so much waste. Through only the avoided costs at today's prices, the operation will pay for itself in twenty years. Whatever is made by selling the recyclable materials is over and above operating costs.

Currently, Bitterroot Disposal serves approximately 4,200 households and several hundred businesses. The plant processes an average of 35 tons of waste per day and has a capacity of 70 tons per day. The operation employees 15 people, which is four more than before they built the MRF. The company hopes soon to develop a large composting capability. This would allow them to remove all paper, yard waste and food waste from the amount being landfilled. At that point the operation would be removing 80 percent of the volume from the waste stream.

Bitterroot Disposal is by far the most progressive and innovative waste management project in the state. It would greatly benefit the state to develop ways to encourage this type of business development that is both economically viable environmentally beneficial.

NEW PROGRAMS

BELGRADE - In May 1990, a private citizen started a door-to-door recycling pickup service called Recycle It. She has a weekly route through the area and picks up aluminum, glass, paper, tin

cans and cardboard from subscribing households. She charges $5 per month for the service.

BOZEMAN - Last year a citizens group called the Bozeman Recycling Coalition formed in order to explore waste management alternatives and policies. Since then the Coalition has provided free monthly curbside pickup of recyclables for about 400 households in the city. Through the dedication of many volunteers the group developed an educational slide show on recycling and has organized public meetings to inform and involve people in the solid waste issue.

A private individual has applied for a grant from the Environmental Protection Agency to develop and institute a Solid Waste Information Center (SWIC) through the Local Government Center at Montana State University. The SWIC would provide state-wide information on waste disposal alternatives through a phone hot-line, regional workshops and educational publications.

The City of Bozeman sponsored a pilot leaf composting project and has instituted variable garbage rates based on volume. They are currently debating the merits of sponsoring a city-wide curbside recycling program.

BUTTE - The local Earth Day organizing committee used the occasion to set up a successful Trash For Trees program that ran during April, May and June 1990. They are currently operating a pilot curbside pickup program to about 400 households in one area of town and hope to expand soon. During meetings regarding the siting of a new landfill, concerned citizens raised recycling as an issue and formed a planning committee which includes the mayor, and representatives from private recyclers, Montana Tech and several other citizens. The group is working on strategies for curbside recycling, evaluating markets and building a broader constituency.

GREAT FALLS - In a joint effort by the Vision 2000 Committee, citizen groups and Green's Disposal, a pilot curbside recycling program was implemented for one area of the city. The program provides weekly recycling pickups from about 300 households, has been very successful, and is slated for expansion. Green's Disposal has ordered a specially built recycling truck and plans to begin a subscription recycling service for the entire city as soon as possible. The fee for the service will probably be $2 per month.

ENNIS - During Earth Day a local group ran a highly successful Trash For Trees program and then followed up by forming an ongoing recycling group. So far the group has mapped out Madison Valley roads and recruited volunteers to "adopt" a two-mile stretch and keep it free of trash. Members are distributing recycling information and recently opened a recycling center.

FLATHEAD COUNTY - The Flathead County solid waste district is in the midst of long range planning review of its management plan. The District has already implemented a tire recycling depository, worked with various industries to reduce waste through reuse and substitution of materials and completed a citizen survey and population study. The county is in the process of purchasing buffer areas around the landfill on which a composting facility and a waste reduction/recycling facility will be built.

An important part of this management plan is an extensive public information and education program including development of a video based curriculum to be used in all local schools, ongoing public meetings and establishment of a clearinghouse for the collection and distribution of solid waste related materials. The needs are well stated in this paragraph from their goals and objectives: "We need a major public education program. This program must attempt to educate the public about what is in <u>their</u> solid waste; how it is generated; what are the disposal alternatives, limitations, and costs; and how we can do a better job."

BIG TIMBER - Interested citizens in the three-county area of Carbon, Stillwater and Sweet Grass counties formed a group called Tri-Cyclers. The organization includes local elected officials, county and city employees, teachers and other concerned people. Their goals are to: (1) reduce the volume of material entering the waste stream, therefore extending the life of landfills and reducing the dependence upon natural resources; and, (2) assist local governments with a significant public and school education program on the benefits of recycling and how to recycle.

Tri-Cyclers plan to obtain recycling equipment for use in each county, assist with community recycling drives, co-host the Mountain Plans States Solid Waste Training Seminar, hold public information meetings, create a local solid waste information library, develop solid waste/recycling curriculum for all schools, and assist and support city and county materials recovery facilities development.

ACTIVE CITIZEN GROUPS

DILLON - Following application for siting a new landfill, citizens caused the state to hold a public meeting. They used the opportunity to discuss the possibility of recycling.

HELENA - The city, along with Lewis and Clark County, is in the process of closing its existing landfill and is actively pursuing several possible alternatives for future solid waste management. The city has proposed a strategy to operate a new landfill and implement some type of recycling program. They have also received proposals from the private sector all of which included

some type of recycling program for the city. A decision is expected soon on the proposals.

Citizen interest and involvement is not confined to the projects discussed above. In nearly every town and city there are groups that have been formed to discuss solid waste issues and options. Towns with active groups include Chester, Conrad, Wolf Point, Sidney, Miles City, Livingston, and Red Lodge. It is very clear that solid waste management is an issue (like the trash) that just will not go away. As new landfill regulations are implemented and more dumps are closed, solid waste will be a high priority issue in Montana.

Appendix D

LC801

**** Bill No. ***

Introduced By **********

By Request of **********

A Bill for an Act entitled: "AN ACT ESTABLISHING A SOLID WASTE REDUCTION TARGET; ESTABLISHING INTEGRATED WASTE MANAGEMENT PRIORITIES; ESTABLISHING A STATE GOVERNMENT SOURCE REDUCTION AND RECYCLING PROGRAM; DIRECTING THE DEPARTMENT OF ADMINISTRATION TO DEVELOP PROCUREMENT GUIDELINES FOR RECYCLED MATERIALS; AUTHORIZING THE PREPARATION OF A STATE SOLID WASTE MANAGEMENT PLAN; AND AMENDING SECTION 75-10-104, MCA.

STATEMENT OF INTENT

A statement of intent is required for this bill because the department of health and environmental sciences will need to promulgate rules in order to implement [this act]. It is the intent of the legislature that these regulations reflect an emphasis on integrated waste management and achieving the 25% source reduction goal by 1996. In addition, the regulations must be designed to protect the public health, safety and welfare and the environment. It is also the intent of the legislature that state government assume a leadership role in the development and implementation of source reduction and recycling programs and in the establishment of markets for the purchase and use of recyclable materials.

Be it enacted by the Legislature of the State of Montana:

NEW SECTION. **Section 1. Short title.** [sections 1 through 8] may be cited as the "Montana Integrated Waste Management Act".

NEW SECTION. **Section 2. Definitions.** As used in [sections 1 through 8], the following definitions apply:

(1) "Waste reduction" means practices that decrease the weight, volume or toxicity of material entering the solid waste management stream after consumer or commercial use but prior to incineration or disposal.

(2) "Integrated waste management" means the coordinated use of a priority of waste management methods, including waste prevention. These priorities are specified in [section 4].

(3) "Recycling" means all activities involving the collection of recyclable material, including but not limited to glass, paper or plastic; the processing of recyclables to prepare them for resale; and the marketing of recovered material for use in the manufacture of similar or different products.

(4) "Department" means the department of health and environmental sciences provided for in 2-15-2101.

(5) "Board" means the board of health and environmental sciences provided for in 2-15-2104.

(6) "Special waste" means solid waste that has unique handling, transportation or disposal requirements to assure protection of the environment and the public health and safety.

(7) "Composting" means the controlled biological decomposition of organic matter into humus.

NEW SECTION. **Section 3. Solid waste reduction target.** It is the goal of the state, by January 1, 1996, to reduce by 25% the volume of solid waste that is either landfilled or incinerated.

NEW SECTION. **Section 4. Integrated waste management priorities.** It is the policy of the state to plan for and implement an integrated approach to solid waste management, which shall be based upon the following order of priority:

(1) reduction of waste generated at the source;

(2) reuse of waste;

(3) recycling of waste;

(4) composting of biodegradable waste; and,

(5) landfill disposal or incineration.

NEW SECTION. **Section 5. State government source reduction and recycling program.** In order to progress toward achieving the waste reduction target identified in [section 3], each state agency, the legislature and the university system shall:

(1) prepare a source reduction and recycling plan by January 1, 1992 to reduce the solid waste generated by state government. This plan must be submitted to the department and must include, at a minimum, the composting of yard wastes and the recycling of office and computer paper, cardboard, used motor oil, and other materials produced by the state for which recycling markets exist or may be developed.

(2) establish and implement a source reduction and recycling program by July 1, 1992.

NEW SECTION. **Section 6. State government procurement of recycled supplies and materials.** (1) The department of administration shall write purchasing specifications that incorporate requirements for the purchase of materials and supplies made from recycled materials, if the use is technologically practical and reasonably cost-effective. By January 1, 1992 these requirements must be incorporated into the purchase of:

(a) paper and paper products;

(b) plastic and plastic products;

(c) glass and glass products;

(d) automobile and truck tires;

(e) motor oil and lubricants; and

(f) other materials and supplies as determined by the department of administration.

(2) It is the goal of the state that by January 1, 1996, 95% of the paper and paper products used by state agencies, universities and the legislature be made from recycled material.

(3) Prior to January 1, 1996, the department of administration shall, to the maximum extent possible, purchase and supply to state agencies paper and paper products that contain recycled rather than virgin material.

(4) To the extent practical, guidelines for the recycled material content of paper should be consistent with nationwide standards for recycled paper developed by the U.S. environmental protection agency or other accepted national organizations.

(5) The department and the department of administration shall establish a joint recycling market-development taskforce. Taskforce membership shall include but not be limited to representatives of the recycling industry, wholesalers, state agencies, citizen and environmental organizations and other interested persons. The taskforce shall:

(a) assist the department of administration in developing purchasing specifications as required in [subsection 1];

(b) develop additional mechanisms for state government to develop markets for recycled materials;

(c) identify procurement barriers that discriminate against the purchase of supplies and products that contain recycled material;

(d) develop recommendations for an informational program designed to educate state employees how to reduce and recycle in the workplace.

NEW SECTION. **Section 7. Requirement to prepare and implement state solid waste management plan.** (1) As a basis for developing an integrated waste management program and insuring adequate disposal capacity, the department shall prepare and implement a state solid waste management plan in accordance with [this act].

(2) The plan shall be comprehensive and integrated and must include at least the following elements:

(a) a capacity assurance element that identifies existing disposal capacity, estimates waste generation rates, and

determines the disposal capacity needed for the future; and, assesses the potential effect of interstate disposal on capacity;

(b) an element that incorporates federal regulations 40 CFR Parts 257 and 258.

(c) an element that identifies the role of each of the components of the integrated waste management priority [section 4] in meeting the solid waste reduction target in [section 3];

(d) a technology assessment element that assesses the availability and practicality of alternative technologies for solid waste management;

(e) an education and public information element that identifies existing education and information programs and describes how the state will increase awareness of and cooperation of the public in environmentally safe solid waste management;

(f) a special waste and household hazardous waste element that identifies types and quantities of wastes that create special disposal problems and recommends methods for handling, collecting, transporting, and disposing of those wastes; and identifies existing and future strategies for managing those wastes;

(g) an element that identifies the needs of rural communities and management strategies to address those needs;

(h) an element that identifies mechanisms to insure proper training of landfill operators; and,

(i) a timeline and implementation strategy for each of the plan elements.

(3) The plan shall be developed with the involvement of local officials, citizens, solid waste and recycling industries, environmental organizations and others involved in the management of solid waste;

(4) The department shall conduct hearings as provided in 75-10-111.

(5) The plan shall be evaluated every five years and updated as necessary.

Section 8. Section 75-10-104, MCA, is amended to read:

"**75-10-104. Duties of department.** The department shall:

(1) prepare a state solid waste management and resource recovery plan as required by [section 7] for submission to the board;

(2) prepare rules necessary for the implementation of this part for submission to the board, including but not limited to rules:

(a) governing the submission of plans for a solid waste management system;

(b) governing procedures to be followed in applying for and making loans;

(c) governing agreements between a local government and the department for grants or loans under this part;

(d) establishing, for the purpose of determining the solid waste management fee to which a facility is subject under 75-10-115, methods for determining or estimating the amount of solid waste incinerated or disposed of at a facility;

(e) providing procedures for the quarterly collection of the solid waste management fee provided for in 75-10-115; and

(f) providing guidelines for a waiver of fees for certain incineration or disposal of solid waste, as provided for in 75-10-115(2); and

(g) providing guidelines for integrated waste management;

(3) provide financial assistance to local governments for front-end planning activities for a proposed solid waste management system which is compatible with the state plan whenever financial assistance is available;

(4) provide technical assistance to persons within the state for planning, designing, constructing, financing, and operating:

(a) a solid waste management system in order to insure that the system conforms to the state plan;

(b) integrated waste management programs;

(c) collection and disposal programs for household hazardous and conditionally exempt small quantities of hazardous waste as defined in 16.44.402 ARM;

(5) provide front-end organizational loans for the implementation of an approved solid waste management system whenever funds for loans are available;

(6) enforce and administer the provisions of this part;

(7) administer loans made by the state under the provisions of this part; and

(8) approve plans for a proposed solid waste management system submitted by a local government."

(9) serve as a clearinghouse for information on waste reduction and reuse, recycling technology and markets, composting, and household hazardous waste disposal, including chemical compatibility.

NEW SECTION. **Section 9. Codification instruction.** [Sections 1 thru 8] are intended to be codified as an integral part of Title 75, chapter 10, and the provisions of Title 75, chapter 10, apply to [sections 1 thru 8].

-END-

Appendix E

LC794

**** Bill No. ***

Introduced By **********

By Request of Environmental Quality Council

A BILL FOR AN ACT ENTITLED: "AN ACT TO ESTABLISH CLASS E MOTOR CARRIER AUTHORITY FOR THE TRANSPORTATION OF RECYCLABLES; AND PROVIDE CLASS D CARRIERS PRIORITY FOR CLASS E MOTOR CARRIER AUTHORITY."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MONTANA:

Section 1. Section 69-12-101, MCA, is amended to read:

"69-12-101. Definitions. Unless the context requires otherwise, in this chapter the following definitions apply:

(1) "Between fixed termini" or "over a regular route" means the termini or route between or over which a motor carrier usually or ordinarily operates motor vehicles, even though there may be periodical or irregular departures from the termini or route.

(2) "Certificate" means the certificate of public convenience and necessity issued under this chapter.

(3) "Compensation" means the charge imposed on motor carriers for the use of the highways in this state by motor carriers under 69-12-421.

(4) "Corporation" means a corporation, company, association, or joint-stock association.

(5) "For hire" means for remuneration of any kind, paid or promised, either directly or indirectly, or received or obtained through leasing, brokering, or buy-and-sell arrangements from which a remuneration is obtained or derived for transportation service.

(6) "Motor carrier" means a person or corporation, or its lessees, trustees, or receivers appointed by any court, operating motor vehicles upon any public highway in this state for the transportation of persons or property for hire on a commercial basis, either as a common carrier or under private contract, agreement, charter, or undertaking. The term includes any motor carrier serving the public in the business of transportation of ashes, trash, waste, refuse, rubbish, garbage, and organic and inorganic matter.

(7) "Motor vehicle" includes vehicles or machines, motor trucks, tractors, or other self-propelled vehicles used for the transportation of property or persons over the public highways of the state.

(8) "Person" means an individual, firm, or partnership.

(9) "Public highway" means a public street, road, highway, or way in this state.

(10) "Railroad" means the movement of cars on rails, regardless of the motive power used."

<u>(11) "Recyclable" means any material diverted from the solid waste stream that can be reused as raw materials for new products and for which markets exist</u>.

Section 2. Section 69-12-205, MCA, is amended to read:

"**69-12-205. Rules to reflect differences between carrier classes.** All rules in relation to schedules, service, tariffs, rates, facilities, accounts, and reports shall have due regard for the differences existing between Class A, Class B, Class C, ~~and~~ Class D, and Class E motor carriers, as herein defined, and shall be just, fair, and reasonable to the said classes of motor carriers in their relations to each other and to the public. In fixing the tariff or rates to be charged by Class A and Class B motor carriers for the carrying of persons and/or property, the commission shall take into consideration the kind and character of service to be performed, the public necessity therefor, and the effect of such tariff and rates upon other transportation agencies, if any, and shall, as far as possible, avoid detrimental or unreasonable competition with existing railroad service or service furnished by a motor carrier."

Section 3. Section 69-12-301, MCA, is amended to read:

"**69-12-301. Classification of motor carriers.** (1) Motor carriers are hereby divided into four classes to be known as:

(a) Class A motor carriers;

(b) Class B motor carriers;

(c) Class C motor carriers;

(d) Class D motor carriers; and

(e) Class E motor carriers.

(2) Class A motor carriers shall embrace all motor carriers operating between fixed termini or over a regular route and under regular rates or charges, based upon either station-to-station rates or upon a mileage rate or scale.

(3) Class B motor carriers shall embrace all motor carriers operating under regular rates or charges based upon either station-to-station rates or upon a mileage rate or scale and not between fixed termini or over a regular route.

(4) Class C motor carriers shall embrace all motor carriers operating motor vehicles for distributing, delivering, or collecting wares, merchandise, or commodities or transporting persons, where the remuneration is fixed in and the transportation service furnished under a contract, charter, agreement, or undertaking.

(5) Class D motor carriers embraces all motor carriers operating motor vehicles transporting (including pickup and disposal) ashes, trash, waste, refuse, rubbish, garbage, and organic and inorganic matter."

(6) Class E motor carriers embrace all motor carriers operating motor vehicles with pick-up service for recyclables for which there is a charge, except those carriers already in possession of a class D certificate.

NEW SECTION. **Section 4. Class E motor carrier certificate.**

(1) Class E carriers shall conduct operations pursuant to a certificate of public convenience and necessity issued by the commission authorizing the transportation of the commodities described in 69-12-301(6). Class E carriers when applying for a new or additional authority shall file an application with the commission in accordance with the requirements of Title 69, chapter 12 and the rules of the commission.

(2) A class E motor carrier certificate may be issued to an applicant for new authority only if the existing class D carrier or municipality in the service area declines to provide pick-up service for recyclables.

NEW SECTION. **Section 5. Codification instruction.** [Section 4] is intended to be codified as an integral part of Title 69, chapter 12, and the provisions of Title 69, chapter 12, apply to [section 4].

-END-

Appendix F

LC791

**** Bill No. ***

Introduced By **********

By Request of the Environmental Quality Council

A BILL FOR AN ACT ENTITLED: "AN ACT ESTABLISHING A SOLID WASTE MANAGEMENT FEE ON WASTE GENERATED OUT OF STATE; AMENDING SECTIONS 75-10-104 AND 75-10-117; REPEALING SECTIONS 75-10-110 and 75-10-115, MCA; AND PROVIDING A DELAYED EFFECTIVE DATE."

WHEREAS, the state of Montana presently is faced with proposals to import out-of-state waste for disposal in Montana; and

WHEREAS, [LC 798] enacts a tipping fee on disposal of solid waste generated within Montana to fund the development of an adequate solid waste regulatory program; and

WHEREAS, the citizens of Montana should not have to subsidize the regulation of solid waste that originates in other states.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MONTANA:

NEW SECTION. **Section 1. Solid waste management fee.** (1) Any person who owns an incinerator that burns solid waste or a solid waste disposal facility that is licensed pursuant to 75-10-221 and rules adopted under 75-10-221 shall pay to the department a quarterly fee of $5 for each ton of solid waste generated outside Montana and incinerated or disposed of at the facility.

(2) All fees must be deposited in the solid waste management account provided for in 75-10-117.

Section 2. Section 75-10-104, MCA, is amended to read:

"**75-10-104. Duties of department.** The department shall:

(1) prepare a state solid waste management and resource recovery plan for submission to the board;

(2) prepare rules necessary for the implementation of this part for submission to the board, including but not limited to rules:

(a) governing the submission of plans for a solid waste management system;

(b) governing procedures to be followed in applying for and making loans;

(c) governing agreements between a local government and the department for grants or loans under this part;

(d) establishing, for the purpose of determining the solid waste management fee to which a facility is subject under ~~75-10-115~~ [section 1], methods for determining or estimating the amount of solid waste incinerated or disposed of at a facility;

(e) providing procedures for the quarterly collection of the solid waste management fee provided for in ~~75-10-115~~ [section 1]; ~~and~~

~~(f) providing guidelines for a waiver of fees for certain incineration or disposal of solid waste, as provided for in 75-10-115(2);~~

(3) provide financial assistance to local governments for front-end planning activities for a proposed solid waste

management system which is compatible with the state plan whenever financial assistance is available;

(4) provide technical assistance to persons within the state for planning, designing, constructing, financing, and operating a solid waste management system in order to insure that the system conforms to the state plan;

(5) provide front-end organizational loans for the implementation of an approved solid waste management system whenever funds for loans are available;

(6) enforce and administer the provisions of this part;

(7) administer loans made by the state under the provisions of this part; and

(8) approve plans for a proposed solid waste management system submitted by a local government."

Section 3. Section 75-10-105, MCA, is amended to read:

"**75-10-105. Powers of department.** The department may:

(1) accept loans and grants from the federal government and other sources to carry out the provisions of this part;

(2) make loans to a local government for the planning, design, and implementation of a solid waste management system;

(3) make grants for a local government for planning or implementation of a solid waste management system; and

(4) collect the solid waste management fee provided for in ~~75-10-115~~ [section 1]."

Section 4. Section 75-10-116, MCA, is amended to read:

"**75-10-116. Penalties for failure to pay fee.** A person who owns a solid waste disposal facility subject to a fee under ~~75-~~

~~10-115~~ [section 1] and fails to pay the fee in the manner provided by department rule is subject to a fine of not more than $2,000 or imprisonment not to exceed 6 months, or both, and shall reimburse the department for the amount of the fee owed and interest calculated at a rate equal to the previous fiscal year's average rate of return on the board of investments' short-term investment pool."

Section 5. Section 75-10-117, MCA, is amended to read:

"**75-10-117. Solid waste management account.** (1) There is a solid waste management account in the state special revenue fund provided for in 17-2-102.

(2) There must be deposited in the account:

(a) all revenue from the solid waste management fee provided for in ~~75-10-115~~ [section 1]; and

(b) money received by the department in the form of legislative appropriations, reimbursements, gifts, federal funds, or appropriations from any source, intended to be used for the purposes of the account.

(3) The account may be used by the department only for the administration of part 2, this part, and 75-2-215."

NEW SECTION. **Section 6. Repealer.** Sections 75-10-110 and 75-10-115, MCA are repealed.

NEW SECTION. **Section 7. Codification instruction.** [Section 1] is intended to be codified as an integral part of Title 75, chapter 10, part 1, and the provisions of Title 75, chapter 10, part 1, apply to [section 1].

NEW SECTION. **Section 8. Effective date.** [This act] is effective on July 1, 1993.

-END-

Appendix G

LC800

**** Bill No. ***

Introduced By **********

By Request of Environmental Quality Council

A BILL FOR AN ACT ENTITLED: "AN ACT ESTABLISHING A CERTIFICATION AND LICENSING PROCESS FOR MEGALANDFILL; PROVIDING FOR CONTRACTS FOR INFORMATION; REQUIRING THE SUBMISSION OF LONG-RANGE PLANS; REQUIRING A CERTIFICATE OF SITE ACCEPTABILITY; SPECIFYING ENVIRONMENTAL FACTORS TO BE EVALUATED; REQUIRING A FILING FEE; PROVIDING A CONTESTED CASE HEARINGS PROCESS; SPECIFYING DECISION MAKING CRITERIA; REQUIRING A LICENSE; REQUIRING MONITORING; PROVIDING FOR ENFORCEMENT BY RESIDENTS; PROVIDING A MECHANISM TO RECOVER DAMAGES FOR CONTAMINATION OF A DRINKING WATER SUPPLY; PROVIDING JUDICIAL REVIEW; PROVIDING PENALTIES FOR VIOLATIONS; PROVIDING A SURETY BOND; AND PROVIDING AN IMMEDIATE EFFECTIVE DATE."

STATEMENT OF INTENT

A statement of intent is required for this bill because it grants rulemaking authority to the board and to the department of health and environmental sciences. It is the intent of the legislature that these regulations be designed to protect the public health, safety, and welfare and the environment.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MONTANA"

NEW SECTION. **Section 1. Short title.** [Sections 1 thru 37] may be cited as the "Montana Megalandfill Siting Act".

NEW SECTION. **Section 2. Purpose.** (1) It is the constitutionally declared policy of this state to maintain and improve a clean and healthful environment for present and future generations, to protect the environment from degradation and prevent unreasonable depletion and degradation of natural resources, and to provide for administration and enforcement to attain these objectives.

(2) The construction of solid waste facilities that dispose of over 200,000 tons of waste per year (megalandfills) may be necessary to meet increasing state and national needs for solid waste disposal capacity. However, due to the volume of waste processed, megalandfills may adversely affect the environment, surrounding communities, and the welfare of the citizens of this state. Therefore, it is necessary to ensure that the location, construction, and operation of megalandfills will produce minimal adverse effects on the environment and upon the citizens of this state by providing that a megalandfill may not be constructed or operated within this state without a certificate of site acceptability pursuant to [section 11] and a license to operate acquired pursuant to [section 26] and 75-10-221.

NEW SECTION. **Section 3. Definitions.** As used in [this chapter], the following definitions apply:

(1) "Application" means an application for a certificate and license submitted in accordance with [sections 11 thru 28] and the rules adopted hereunder.

(2) "Board" means the board of health and environmental sciences provided for in 2-15-2104.

(3) "Certificate" means the certificate of site acceptability issued by the board under [section 11] that is required for siting a megalandfill.

(4) "Commence to construct" means:

(a) any clearing of land, excavation, construction, or other action that would affect the environment of the site but does not mean changes for securing geological data, including necessary borings to ascertain subsurface conditions;

(b) the modification or upgrading of an existing solid waste disposal facility into a megalandfill except that the term does not pertain to maintenance or repair of an existing facility.

(5) "Department" means the department of health and environmental sciences provided for in Title 2, chapter 15, part 21.

(6) "Dispose" or "disposal" means the discharge, injection, deposit, dumping, spilling, leaking, or placing of any solid waste into or onto the land so that the solid waste or any constituent of it may enter the environment or be emitted into the air or discharged into any waters, including groundwaters.

(7) "Megalandfill" means any new or existing solid waste landfill that accepts more than 200,000 tons per year of solid waste.

(8) "Person" means an individual, firm, partnership, company, association, corporation, city, town, local governmental

entity, or any other governmental or private entity, whether organized for profit or not.

(9) "Solid waste" means all putrescible and nonputrescible wastes, including but not limited to garbage; rubbish; refuse; ashes; sludge from sewage treatment plants, water supply treatment plants, or air pollution control facilities; construction and demolition wastes; dead animals, including offal; discarded home and industrial appliances; and wood products or wood byproducts and inert materials. "Solid waste" does not mean municipal sewage, industrial wastewater effluents, mining wastes regulated under the mining and reclamation laws administered by the department of state lands, slash and forest debris regulated under laws administered by the department of state lands, or marketable byproducts.

(10) "Solid waste landfill" means any publicly or privately owned landfill or landfill unit that receives household waste or other types of waste, including commercial waste, nonhazardous sludge, and industrial solid waste. The term does not include land application units, surface impoundments, injection wells, or waste piles.

(11) "Solid waste management system" means a system which controls the storage, treatment, recycling, recovery, or disposal of solid waste.

NEW SECTION. **Section 4. Adoption of rules by the board.** The board may adopt rules implementing the certification provisions of [this chapter], including rules regarding the filing and contents of the application, proof of service and notice

requirements, environmental factors to be evaluated, filing fee, hearings process and other components of the certificate and certification process that the board deems necessary.

NEW SECTION. **Section 5. Adoption of rules by the department.** The department may adopt rules implementing the licensing provisions of [this chapter], including rules regarding the contents of the application, monitoring and other components of the license and licensing process that the department deems necessary.

NEW SECTION. **Section 6. Contracts for information.** (1) The department may contract with a potential applicant under [this chapter] in advance of the filing of a formal application for the development of information or provision of services required under [this chapter].

(2) Payments made to the department under such a contract must be credited against the fee payable under [section 16].

NEW SECTION. **Section 7. Grants, gifts, and funds.** The department may receive grants, gifts, and other funds from any public or private source to assist in its activities under [this chapter].

NEW SECTION. **Section 8. Money to solid waste management account.** All fees, taxes, fines, and penalties collected under [this chapter], except those collected by a justice's court, must be deposited in the solid waste management account as provided in 75-10-117 for use by the department in carrying out its solid waste functions and responsibilities.

NEW SECTION. **Section 9. Annual long-range plan submitted -- contents -- available to public.** (1) No person may file an application for a certificate of site acceptability required in [section 11] unless the megalandfill has been adequately identified in a long-range plan at least 2 years prior to acceptance of an application by the department.

(2) The annual long-range plan must be submitted by July 1 of each year and must include the following:

(a) the general location, size, and type of all facilities to be owned and operated by the person whose construction is projected during the ensuing 2 years, as well as those facilities to be closed during the planning period;

(b) a description of the efforts to involve environmental protection and land use planning agencies in the planning process, as well as other efforts to identify and minimize environmental problems at the earliest possible stage in the planning process;

(c) projections of the demand for the service rendered by the person and an explanation of the basis for those projections and a description of the manner and extent to which the proposed facilities will meet the projected demand; and

(e) additional information that the department by rule or the department on its own initiative or upon the advice of interested state agencies might request in order to carry out the purposes of [this chapter].

(3) The plan must be furnished to the governing body of each county in which any facility included in the plan under

[subsection (2)(a)] is proposed to be located and made available to the public by the department. The applicant shall give public notice throughout the state by publishing at least once a week for 2 consecutive weeks a summary of the proposed plan in newspapers of general circulation. The plan must also be filed with the environmental quality council, the department of highways, the department of state lands, the department of fish, wildlife, and parks, the department of commerce, and the department of natural resources and conservation. Citizen environmental protection and resource planning groups and other interested persons may obtain a plan by written request and payment therefor to the department.

NEW SECTION. **Section 10. Study of included facilities.** If a person lists and identifies a proposed facility in its long-range plan, submitted pursuant to [section 9], as one on which construction is proposed within the 2-year period following submission of the plan, the department shall begin to examine and evaluate the proposed site to determine whether construction of the proposed facility would unduly impair the environmental values described in [section 15]. This study may be continued until a person files an application for a certificate under [section 11]. Information gathered under this section may be used to support findings and recommendations required for issuance of a certificate and license.

NEW SECTION. **Section 11. Certificate required.** (1) A person may not construct a megalandfill in the state without first

applying for and obtaining a certificate of site acceptability from the board.

(2) A certificate may only be issued pursuant to [sections 11 thru 25].

NEW SECTION. **Section 12. Certificate transferable.** A certificate may be transferred, subject to the approval of the board, to a person who agrees to comply with the terms, conditions, and modifications contained in [this chapter].

NEW SECTION. **Section 13. Application -- filing and contents -- proof of service and notice.** (1) (a) An applicant shall file with the department an application for a certificate under [section 11] in such form as the board requires under applicable rules, containing the following information:

(i) a description of the proposed location and of the facility to be built;

(ii) a summary of any studies which have been made of the environmental impact of the facility;

(iii) a description of at least three reasonable alternate locations for the facility, a general description of the comparative merits and detriments of each location submitted, and a statement of the reasons why the proposed location is best suited for the facility;

(iv) baseline data for the primary and reasonable alternate locations; or

(v) at the applicant's option, an environmental study plan to satisfy the requirements of [this chapter]; and

(vi) other information as the applicant considers relevant or as the board by order or rule may require.

(b) A copy or copies of the studies referred to in [subsection (1)(a)(ii)] must be filed with the department, if ordered, and must be available for public inspection.

(3) An application must be accompanied by proof of service of a copy of the application on the chief executive officer of each unit of local government, county commissioner, city or county planning boards, solid waste district, and federal agencies charged with the duty of protecting the environment or of planning land use in the area in which any portion of the proposed facility is proposed or is alternatively proposed to be located and on the following state government agencies:

(a) environmental quality council;

(b) department of fish, wildlife, and parks;

(c) department of state lands;

(d) department of commerce;

(e) department of highways;

(f) department of natural resources and conservation.

(4) The copy of the application must be accompanied by a notice specifying the date on or about which the application is to be filed.

(5) An application must also be accompanied by proof that public notice was given to persons residing in the area in which any portion of the proposed facility is proposed or is alternatively proposed to be located, by publication of a summary

of the application in those newspapers of general circulation that will substantially inform those persons of the application.

NEW SECTION. **Section 14. Supplemental material -- amendments.** (1) An application for an amendment of an application or a certificate shall be in such form and contain such information as the board by rule or the department by order prescribes. Notice of such an application shall be given as set forth in [section 13, subsections (3), (4), and (5)].

(2) An application may be amended by an applicant any time prior to the department's recommendation. If the proposed amendment is such that it prevents the department from carrying out its duties and responsibilities under [this chapter], the department may require such additional filing fees as the department determines necessary, or the department may require a new application and filing fee.

(3) The applicant shall submit supplemental material in a timely manner as requested by the department or as offered by the applicant to explain, support, or provide the detail with respect to an item described in the original application, without filing an application for an amendment. The department's determination as to whether information is supplemental or whether an application for amendment is required shall be conclusive.

NEW SECTION. **Section 15. Environmental factors evaluated during certification.** In evaluating applications for a certificate of site acceptability, the department shall give consideration to the following list of environmental factors,

where applicable, and may by rule add to the categories of this section:

(1) siting criteria for municipal solid waste landfills consistent with federal requirements as described in 40 CFR Part 258;

(2) siting criteria described under the Montana Solid Waste Management Act, Title 75, chapter 10, part 2, and associated rules;

(3) the Montana solid waste management plan;

(4) solid waste disposal needs:

(a) availability and desirability of alternative sources of solid waste disposal;

(b) availability and desirability of alternative sources of solid waste disposal in lieu of the proposed facility;

(c) promotional activities of the applicant which may have given rise to the need for this facility;

(d) social benefits resulting from the facility, including protection of public health and environmental quality;

(e) integrated waste management activities which could reduce the need for additional solid waste disposal capacity;

(5) land use impacts:

(a) area of land required and ultimate use;

(b) consistency with state and regional solid waste plans;

(c) consistency with existing and projected nearby land use;

(d) alternative uses of the site;

(e) impact on population already in the area, population attracted by construction or operation of the facility itself;

(f) impact of availability of solid waste disposal from this facility on growth patterns and population dispersal;

(i) construction materials and practices including quality control and quality assurance plans to be followed during construction of all phases of the proposed facility;

(j) scenic impacts;

(k) effects on natural systems, wildlife, plant life;

(l) impacts on important historic architectural, archaeological, and cultural areas and features;

(o) public facilities and accommodation;

(p) opportunities for joint use with solid waste disposal-intensive industries;

(6) water resources impacts:

(a) hydrologic studies of adequacy of water supply and impact of facility on streamflow, lakes, and reservoirs;

(b) hydrogoelogic studies of the impact of facilities on ground water including vadose zone studies describing the potential for leachate to migrate from the facility to groundwater;

(c) inventory of effluents, including physical, chemical, and biological characteristics;

(d) hydrologic studies of effects of effluents on receiving waters;

(e) relationship to water quality standards;

(f) relationship to projected uses;

(g) effects on plant and animal life, including algae, macroinvertebrates, and fish population;

(h) effects on unique or otherwise significant ecosystems, e.g., wetlands;

(i) groundwater, vadose zone and methane gas monitoring systems and programs; and

(7) characteristics of solid wastes that will be disposed of at the facility:

(a) rate of solid waste disposal;

(b) solid waste handling practices used; and

(c) present and expected future physical and chemical characteristics of the solid waste.

NEW SECTION. Section 16. **Filing fee -- accountability -- refund -- use.** (1) (a) The applicant shall pay to the department a filing fee as provided in this section based upon the department's estimated costs of processing the application for certificate. The filing fee must be deposited in the solid waste management account for the use of the department in administering [this chapter]. The initial filing fee must not exceed the following scale based upon the megalandfills projected annual tonnage of waste:

(i) base fee of $40,000; plus

(ii) $.20 per ton for every ton of waste over 200,000 tons.

(b) The department may allow a credit against the fee payable under this section for the development of information or provision of services required under [this chapter] or required for preparation of an environmental impact statement under the

Montana Environmental Policy Act (75-1-101) or National Environmental Policy Act (42 USC 4321 et seq.). The applicant may submit the information to the department together with an accounting of the expenses incurred in preparing the information. The department shall evaluate the applicability, validity, and usefulness of the data and determine the amount which may be credited against the filing fee payable under this section. Upon 30 days' notice to the applicant, this credit may at any time be reduced if the department determines that it is necessary to carry out its responsibilities under this chapter.

(2) (a) The department may contract with an applicant for the development of information, provision of services and payment of fees required under [this chapter]. The contract may continue an agreement entered into pursuant to [section 6]. Payments made to the department under such a contract must be credited against the fee payable hereunder. Notwithstanding the provisions of this section, the revenue derived from the filing fee must be sufficient to enable the department and the board to carry out their responsibilities under [this chapter]. The department may amend a contract to require additional payments for necessary expenses up to the limits set forth in subsection (1)(a) upon 30 days' notice to the applicant. The department and applicant may enter into a contract which exceeds the scale provided in subsection (1)(a).

(b) If a contract is not entered into, the applicant shall pay the filing fee in installments in accordance with a schedule of installments developed by the department, provided that no one

installment may exceed 20% of the total filing fee provided for in
subsection (1).

(3) The applicant is entitled to an accounting of moneys spent and to a refund at the rate of 6% a year of that portion of the filing fee not spent by the department in carrying out its responsibilities under [this chapter]. A refund must be made after all administrative and judicial remedies have been exhausted by all parties to the certification proceedings.

(4) The revenues derived by the filing fees must be used by the department in compiling the information required for rendering a decision on a certificate and for carrying out its and the board's other responsibilities under [this chapter].

NEW SECTION. **Section 17. Study, evaluation, and report on proposed facility.** (1) After receipt of an application, the department of health shall within 90 days notify the applicant in writing that:

(a) the application is accepted as complete; or

(b) the application is not complete and list the deficiencies therein; and upon correction of these deficiencies and resubmission by the applicant, the department shall within 30 days notify the applicant in writing that the application is in compliance and is accepted as complete.

(2) Upon receipt of an application complying with [sections 9 thru 16], and this section, the department shall commence an intensive study and evaluation of the proposed facility and its effects, considering all applicable criteria listed in [section

24]. The department shall use, to the extent it considers applicable, valid and useful existing studies and reports submitted by the applicant or compiled by a state or federal agency.

(3) Within one year following acceptance of a complete application for a facility the department shall make a report to the board which must contain the department's studies, evaluations, recommendations, other pertinent documents resulting from its study and evaluation, and an environmental impact statement or analysis prepared pursuant to the Montana Environmental Policy Act (Title 75-1-101), if any.

NEW SECTION. **Section 18. Voiding an application.** An application may be voided by the department for:

(1) any material and knowingly false statement in the application or in accompanying statements or studies required of the applicant;

(2) failure to file an application in substantially the form and content required by [sections 13] and the rules adopted thereunder; or

(3) failure to deposit the filing fee as provided in [section 16].

NEW SECTION. **Section 19. Hearing date -- location -- department to act as staff.** (1) Upon receipt of the department's report submitted under [section 17], the board shall set a date for a hearing to begin not more than 120 days after the receipt. Certification hearings shall be conducted by the board in the county seat of Lewis and Clark County or the county in which the

facility or the greater portion of the facility is to be located.

(2) Except as provided in [section 21] the department shall act as the staff for the board throughout the decisionmaking process and the board may request that the department present testimony or cross-examine witnesses as the board considers necessary and appropriate.

NEW SECTION. **Section 20. Amendments to a certificate.** (1) Within 30 days after notice of an amendment to a certificate is given as set forth in [section 14], including notice to all active parties to the original proceeding, the department shall determine whether the proposed change in the facility would result in a material increase in any environmental impact caused by the facility or a substantial change in the location of all or a portion of the facility as set forth in the certificate. If the department determines that the proposed change would result in a material increase in any environmental impact by the facility or a substantial change in the location of all or a portion of the facility, the board shall hold a hearing in the same manner as a hearing is held on an application for a certificate. After hearing, the board shall grant, deny, or modify the amendment with such conditions as it deems appropriate.

(2) In those cases where the department determines that the proposed change in the facility would not result in a material increase in any environmental impact or would not be a substantial change in the location of all or a portion of the facility, the board shall automatically grant the amendment

either as applied for or upon such terms or conditions as the board considers appropriate unless the department's determination is appealed to the board within 15 days after notice of the department's determination is given.

(3) If the department or the board, under [subsection 4], determines that a hearing is required because the proposed change would result in a material increase in any environmental impact of the facility or a substantial change in the location of all or a portion of the facility, the applicant has the burden of showing by clear and convincing evidence that the amendment should be granted. (4) If the department determines that the proposed change in the facility would not result in a material increase in any environmental impact or would not be a substantial change in the location of all or a portion of the facility and a hearing is required because the department's determination is appealed to the board as provided in [subsection 2], the appellant has the burden of showing by clear and convincing evidence that the proposed change in the facility would result in a material increase in any environmental impact of the facility or a substantial change in the location of all or a portion of the facility as set forth in the certificate.

NEW SECTION. **Section 21. Hearing examiner -- restrictions -- duties.** (1) If the board appoints a hearing examiner to conduct any certification proceedings under this chapter, the hearing examiner may not be a member of the board, an employee of the department or the board. A hearing examiner, if any, shall be

appointed by the board within 20 days after the department's report has been filed with the board.

(2) A prehearing conference shall be held following notice within 60 days after the department's report has been filed with the board.

(3) The prehearing conference shall be organized and supervised by the hearing examiner.

(4) The prehearing conference shall be directed toward a determination of the issues presented by the application, the department's report, and an identification of the witnesses and documentary exhibits to be presented by the active parties who intend to participate in the hearing.

(5) The hearing examiner shall require the active parties to submit, in writing, and serve upon the other active parties, all direct testimony which they propose and any studies, investigations, reports, or other exhibits that any active party wishes the board to consider. These written exhibits and any documents that the board itself wishes to use or rely on shall be submitted and served in like manner, at least 20 days prior to the date set for the hearing. For good cause shown, the hearing examiner may allow the introduction of new evidence at any time.

(6) The hearing examiner shall allow discovery which must be completed before the commencement of the hearing, upon good cause shown and under such other conditions as the hearing examiner shall prescribe.

(7) Public witnesses and other interested public parties may appear and present oral testimony at the hearing or submit

written testimony to the hearing examiner at the time of their appearance. These witnesses are subject to cross-examination.

(8) The hearing examiner shall issue a prehearing order specifying the issues of fact and of law, identifying the witnesses of the active parties, naming the public witnesses and other interested parties who have submitted written testimony in lieu of appearance, outlining the order in which the hearing shall proceed, setting forth those [section 24] criteria as to which no issue of fact or law has been raised which are to be conclusively presumed and are not subject to further proof except for good cause shown, and any other special rules to expedite the hearing which the hearing examiner shall adopt with the approval of the board.

(9) At the conclusion of the hearing, the hearing examiner shall declare the hearing closed and shall, within 60 days of that date, prepare and submit to the board and in the case of a conjunctive hearing, within 90 days to the board and the board of health or department of health proposed findings of fact, conclusions of law, and a recommended decision.

(10) The hearing examiner appointed to conduct a certification proceeding under [section 21] shall ensure that the time of the proceeding, from the date the department's report is filed with the board until the recommended report and order of the examiner is filed with the board, does not exceed 9 calendar months unless extended by the board for good cause.

(11) The board or hearing examiner may waive all or a portion of the procedures set forth in [subsections (2) through

(8)] of this section to expedite the hearing for a facility when the department has recommended approval of a facility and no objections have been filed.

NEW SECTION. **Section 22. Parties to certification proceeding -- waiver -- statement of intent to participate.** (1) The parties to a certification proceeding or to a proceeding involving the issuance of a decision, opinion, order, certification, or permit by the board under [this chapter] may include as active parties: (a) the applicant;

(b) each political entity, unit of local government, and government agency, entitled to receive service of a copy of the application under [section 13];

(c) any person entitled to receive service of a copy of the application under [section 13];

(d) any nonprofit organization formed in whole or in part to promote conservation or natural beauty; to protect the environment, personal health, or other biological values; to preserve historical sites; to promote consumer interests; to represent commercial and industrial groups; or to promote the orderly development of the areas in which the facility is to be located;

(e) any other interested person who establishes an interest in the proceeding.

(2) The department shall be an active party in any certification proceeding in which the department recommends denial of all or a portion of a facility.

(3) The parties to a certification proceeding may also include, as public parties, any Montana citizen and any party referred to in [subsection 1 (b), (c), (d), or (e)].

(4) Any party waives the right to be a party if the party does not participate in the hearing before the board.

(5) Each unit of local government entitled to receive service of a copy of the application under [section 13 (3)] shall file with the board a statement showing whether the unit of local government intends to participate in the certification proceeding. If the unit of local government does not intend to participate, it shall list in this statement its reasons for failing to do so. This statement of intent must be published before the proceeding begins in a newspaper of general circulation within the jurisdiction of the applicable unit of local government.

NEW SECTION. **Section 23. Record of hearing -- procedure -- rules of evidence -- burden of proof.** (1) Any studies, investigations, reports, or other documentary evidence, including those prepared by the department, which any party wishes the board to consider or which the board itself expects to utilize or rely upon must be made a part of the record.

(2) A record must be made of the hearing and of all testimony taken.

(3) In a certification proceeding held under [section 19], the applicant has the burden of showing by clear and convincing evidence that the application should be granted and that the criteria of [section 24] are met.

(4) All proceedings under [sections 19 thru 23] are governed by the procedures set forth in [sections 19 thru 23], the procedural rules adopted by the board, and the Montana Rules of Evidence unless one or more rules of evidence are waived by the hearing examiner upon a showing of good cause by one or more of the parties to the hearing. No other rules of procedure or evidence apply except that the contested case procedures of the Montana Administrative Procedure Act if not in conflict with the procedures set forth in [sections 19 thru 23] or the procedural rules adopted by the board.

NEW SECTION. **Section 24. Decision of board -- findings necessary for certification.** (1) Within 180 days after submission of the recommended decision by the department, the board shall make complete findings, issue an opinion, and render a decision upon the record, either granting or denying the application for certificate as filed or granting it upon such terms, conditions, or modifications of the siting of the facility as the board considers appropriate.

(2) The board may not grant a certificate either as proposed by the applicant or as modified by the board unless it shall find and determine:

(a) the nature of the probable environmental impact;

(b) that the megalandfill minimizes adverse environmental impact, considering the state of available technology and the nature and economics of the various alternatives;

(c) that the location of the facility as proposed conforms to applicable state and local laws and regulations, except that

the board may refuse to apply any local law or regulation if it finds that, as applied to the proposed facility, the law or regulation is unreasonably restrictive in view of the existing technology, of factors of cost or economics, or of the needs of consumers, whether located inside or outside of the directly affected government subdivisions;

(d) that the facility will serve the public interest;

(e) each of the criteria listed in [section 15];

(f) that the proposed site is better suited for a landfill than alternate sites in the state where the waste originates; and

(g) that the applicant has fully mitigated the loss of wildlife habitat, either through on- or off-site habitat improvements;

(3) In determining that the facility will serve the public interest the board shall consider:

(a) the items listed in [subsections (2)(a) and (2)(b)];

(b) the benefits to the applicant and the state resulting from the proposed facility;

(c) the effects of the economic activity resulting from the proposed facility;

(d) the effects of the proposed facility on the public health, welfare, and safety;

(e) any other factors that it considers relevant.

NEW SECTION. **Section 25. Conditions imposed.** (1) If the board determines that the location of all or a part of the proposed megalandfill should be modified, it may condition its certificate upon such modification, provided that the persons

residing in the area affected by the modification have been given reasonable notice of the modification.

NEW SECTION. **Section 26. License required.** (1) A person may not commence construction at a megalandfill site in the state without first applying for and obtaining a license pursuant to 75-10-221. The licensing process must be concurrent with the certification process required in [section 11 through 25].

(2) The department shall make the decision to grant or deny the license within 30 days of the certification decision, as provided in [section 25].

(3) Once a license has been issued, a megalandfill may not be constructed, operated, or maintained except in conformity with the permit and any terms, conditions, and modifications contained therein.

NEW SECTION. **Section 27. License transferable.** A permit may be transferred, subject to the approval of the department, to a person who agrees to comply with the terms, conditions, and modifications contained in [this chapter].

NEW SECTION. **Section 28. Opinion issued with decision -- contents.** (1) In rendering a decision on an application for a license for a megalandfill, the department shall issue an opinion stating its reasons for the action taken.

(2) In addition to the requirements of 75-10-221, any license issued by the department shall include the following:

(a) an environmental evaluation statement related to the megalandfill being certified. The statement shall include but not be limited to analysis of the following information:

(i) the environmental impact of the proposed facility;

(ii) any adverse environmental effects which cannot be avoided by issuance of the license;

(iii) problems and objections raised by other federal and state agencies and interested groups; and

(iv) alternatives to the proposed facility;

(b) a plan for monitoring environmental effects of the proposed facility;

(c) a plan for monitoring the certified megalandfill site between the time of certification and completion of construction; and

(d) a statement signed by the applicant showing agreement to comply with the requirements of this chapter and the conditions of the certificate.

NEW SECTION. **Section 29. Monitoring.** The department shall monitor the operations of all certificated facilities to assure continuing compliance with [this chapter] and certificates issued under [section 11] and for discovering and preventing noncompliance with [this chapter] and the certificates.

NEW SECTION. **Section 30. Revocation or suspension of license.** A license may be revoked or suspended by the department following a notice and an opportunity for a hearing before the department:

(1) for any material false statement in the application or in accompanying statements or studies required of the applicant if a true statement would have warranted the department's refusal to grant a license;

(2) for failure to comply with the terms or conditions of the certificate; or

(3) for violation of any provision of [this chapter], the associated rules, or orders of the department.

NEW SECTION. **Section 31. Enforcement by residents.** (1) A person with knowledge that a requirement of [this chapter] or a rule adopted under it is not being enforced by a public officer or employee whose duty it is to enforce the requirement or rule may bring the failure to enforce to the attention of the public officer or employee by a written statement under oath that shall state the specific facts of the failure to enforce the requirement or rule. Knowingly making false statements or charges in the affidavit subjects the affiant to penalties prescribed under the law of perjury.

(2) If the public officer or employee neglects or refuses for an unreasonable time after receipt of the statement to enforce the requirement or rule, the resident may bring an action of mandamus in the district court of the first judicial district of Montana. If the court finds that a requirement of [this chapter] or a rule adopted under it is not being enforced, the court may order the public officer or employee whose duty it is to enforce the requirement or rule to perform those duties. If he fails to do so, the public officer or employee shall be held in

contempt of court and is subject to the penalties provided by law. NEW SECTION. **Section 32. Action to recover damages to water supply.** An owner of an interest in real property who obtains all or part of his supply of water for domestic, agricultural, industrial, or other legitimate use from a surface or underground source may sue a person to recover damages for contamination, diminution, or interruption of the water supply proximately resulting from the operation of a facility. The remedies enumerated in this section do not exclude the use of any other remedy which may be available under the laws of the state.

NEW SECTION. **Section 33. Judicial review of department and board of health decisions.** (1) An applicant aggrieved by the final decision of the board on an application for a certificate or the decision of the department on an application for a license may obtain judicial review of that decision by the filing of a petition in a state district court of competent jurisdiction.

(2) The judicial review procedure shall be the same as that for contested cases under the Title 2, chapter 4 part 7, Montana Administrative Procedure Act.

(3) Nothing in this section may be construed to prohibit the department from holding a hearing on all matters that are not the subject of a pending appeal by the applicant under [subsection (3)(a)].

NEW SECTION. **Section 34. Penalties for violation -- civil action by attorney general.** (1) (a) Whoever commences to construct or operate a megalandfill without first obtaining a

certificate required under [section 11] and a license under [section 26], or constructs, operates, or maintains a facility other than in compliance with the certificate or violates any other provision of [this chapter] or any rule or order adopted thereunder or knowingly submits false information in any report, long-range plan, or application required by [this chapter] or rule or order adopted thereunder or causes any of the aforementioned acts to occur is liable for a civil penalty of not more than $25,000 for each violation.

(b) Each day of a continuing violation constitutes a separate offense.

(c) The penalty is recoverable in a civil suit brought by the attorney general on behalf of the state in the district court of the first judicial district of Montana.

(2) Whoever knowingly and willfully violates [subsection 1] shall be fined not more than $25,000 for each violation or imprisoned for not more than 1 year, or both. Each day of a continuing violation constitutes a separate offense.

(3) In addition to any penalty provided in [subsection 1] or [subsection 2], whenever the department determines that a person is violating or is about to violate any of the provisions of [this chapter], it may refer the matter to the attorney general who may bring a civil action on behalf of the state in the district court of the first judicial district of Montana for injunctive or other appropriate relief against the violation and to enforce [this chapter] or a certificate issued under [section

11]. Upon a proper showing, a permanent or preliminary injunction or temporary restraining order must be granted without bond.

(4) The department shall also enforce [this chapter] and bring legal actions to accomplish the enforcement through its own legal counsel.

(5) All fines and penalties collected shall be deposited in the solid waste management account for the use of the department in administering [this chapter].

NEW SECTION. **Section 35. Optional annual installments for location of megalandfill on landowner's property.** A landowner upon whose land a megalandfill is proposed to be located shall have the option of receiving any negotiated settlement for use of his land, if and when the land is used for a megalandfill, by easement, right-of-way, or other legal conveyance in either a lump sum or in not more than five consecutive annual installments.

NEW SECTION. **Section 36. Order not stayed by appeal -- stay or suspension by court -- limitations.** Notwithstanding any contrary provision in the law, the pendency of an appeal from a department order does not automatically stay or suspend the operation of the order. During the pendency of the appeal, the court may upon motion by one of the parties stay or suspend, in whole or in part, the operation of the department's orders on terms the court considers just. The court's action must be in accordance with the practice of courts exercising equity jurisdiction, subject to the following limitations:

(1) No stay may be granted without notice to the parties and an opportunity to be heard by the court.

(2) No department order may be stayed or suspended without finding that irreparable damage would otherwise result to the party seeking the stay or suspension, and any other stay or suspension of a department order must specify the nature of the damage.

NEW SECTION. **Section 37. Surety bond -- other security.** If an order of the department is stayed or suspended, the court may require a bond with good and sufficient surety conditioned that the party petitioning for review answer for all damages caused by the delay in enforcing the order of the department; except that the cost of the bond is not chargeable to the applicant as part of the fee. If the party petitioning for review prevails upon final resolution of an appeal, the party does not forfeit bond nor is the party responsible for damages caused by delay.

NEW SECTION. **Section 38. Codification instruction.** [Sections 1 thru 37] are intended to be codified as an integral part of Title 75, chapter 10, and the provisions of Title 75, chapter 10, apply to [sections 1 thru 37].

NEW SECTION. **Section 39. Effective date.** [This act] is effective on passage and approval.

-END-

Appendix H

LC799

**** Bill No. ***

Introduced By **********

By Request of Environmental Quality Council

A BILL FOR AN ACT ENTITLED "AN ACT PROVIDING FOR A LOCAL REFERENDUM ON THE ESTABLISHMENT OF A MEGA-LANDFILL; AND PROVIDING AN IMMEDIATE EFFECTIVE DATE."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MONTANA:

NEW SECTION. **Section 1. Definitions.** "Mega-landfill" means any new or existing municipal solid waste landfill that accepts for disposal more than 200,000 tons of solid waste per year.

NEW SECTION. **Section 2. Local approval of the establishment of a mega-landfill by referendum.** (1) Upon petition by 15% of the eligible voters in the county or counties in which the establishment of a mega-landfill is proposed, a referendum must be held to determine whether it is the will of the people that the mega-landfill be located in the county or counties.

(2) The referendum must be conducted pursuant to 7-5-132 through 7-5-137.

(3) If a majority of the legal votes cast in the referendum are against the siting of a mega-landfill within the county or counties, then the department of health and environmental sciences shall not proceed any further with the certification

process set forth in [LC800] and the license application process set forth under 75-10-221.

(4) If a majority of the legal votes cast in the referendum are for the siting of the mega-landfill within the county or counties, then the certification process set forth in [LC800] and the license application process set forth under 75-10-221 may proceed, but the vote will not require the department of health and environmental sciences to approve the application to establish a mega-landfill.

NEW SECTION. **Section 3. Codification instruction.** [Sections 1 and 2] are intended to be codified as an integral part of Title 75, chapter 10, and the provisions of Title 75, chapter 10, apply to [sections 1 and 2].

NEW SECTION. **Section 4. Effective date.** [This act] is effective on passage and approval.

-END-

Appendix I

LCpvtpubl

**** Bill No. ***

Introduced By **********

By Request of **********

A Bill for an Act entitled: "AN ACT PROVIDING A PREFERENCE FOR PRIVATELY OPERATED SOLID WASTE MANAGEMENT SYSTEMS; PROVIDING AUTHORITY TO THE DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES TO DEVELOP PROCEDURES TO DETERMINE WHETHER SOLID WASTE MANAGEMENT SYSTEMS SHOULD BE PRIVATELY OR PUBLICLY OPERATED; AND AMENDING SECTIONS 75-10-102, 75-10-104, 75-10-106."

STATEMENT OF INTENT

A statement of intent is required for this bill in order to provide guidance to the department on the procedure to be required of applicants for a license under 75-10-221. The department of health and environmental sciences shall develop rules relating to information required for a complete application for a license for a new solid waste management system, that include the following:

(1) Documentation of a public hearing and notice of the hearing on the question of public or private management of the proposed waste management system.

(2) Required assumptions and calculations of costs and benefits for evaluating alternative proposals for management of the proposed solid waste management system.

(3) Information required to justify the decision of any applicant to use private or public management of the proposed solid waste management system.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MONTANA:

Section 1. Section 75-10-102, MCA, is amended to read:

"**75-10-102. Public policies.** (1) To implement this part, the following are declared to be public policies of this state:

(a) Maximum recycling from solid waste is necessary to protect the public health, welfare, and quality of the natural environment.

(b) Solid waste management systems shall be developed, financed, planned, designed, constructed, and operated for the benefit of the people of this state.

(c) Private industry is to be utilized to the maximum extent possible in planning, designing, managing, constructing, operating, manufacturing, and marketing functions related to solid waste management systems.

(d) Local governments shall retain primary responsibility for adequate solid waste management with the state preserving those functions necessary to assure effective solid waste management systems throughout the state. <u>Local governments have primary responsibility for determining, under procedures developed by the department in 75-10-104, the extent that private industry is utilized in solid waste management systems, and shall provide a preference to private industry if costs and services are substantially equal to alternate publicly operated services.</u>

(e) Encouragement and support be given to individuals and

municipalities to separate solid waste at its source in order to maximize the value of such wastes for reuse.

(f) The state shall provide technical advisory assistance to local governments and other affected persons in the planning, developing, financing, and implementation of solid waste management systems.

(g) Actions and activities performed or carried out by persons and their contractors in accordance with this part shall be in conformity with the state solid waste plan.

(2) This part is in addition and supplemental to any other law providing for the financing of a solid waste management system and does not amend or repeal any other law.

Section 2. Section 75-10-104, MCA, is amended to read:

"**75-10-104. Duties of department.** The department shall:

(1) prepare a state solid waste management and resource recovery plan for submission to the board;

(2) prepare rules necessary for the implementation of this part for submission to the board, including but not limited to rules:

(a) governing the submission of plans for a solid waste management system;

(b) governing procedures to be followed in applying for and making loans;

(c) governing agreements between a local government and the department for grants or loans under this part;

(d) establishing, for the purpose of determining the solid waste management fee to which a facility is subject under 75-10-

115, methods for determining or estimating the amount of solid waste incinerated or disposed of at a facility;

(e) providing procedures for the quarterly collection of the solid waste management fee provided for in 75-10-115; and

(f) providing guidelines for a waiver of fees for certain incineration or disposal of solid waste, as provided for in 75-10-115(2);

(3) provide financial assistance to local governments for front-end planning activities for a proposed solid waste management system which is compatible with the state plan whenever financial assistance is available;

(4) provide technical assistance to persons within the state for planning, designing, constructing, financing, and operating a solid waste management system in order to insure that the system conforms to the state plan;

(5) provide front-end organizational loans for the implementation of an approved solid waste management system whenever funds for loans are available;

(6) enforce and administer the provisions of this part;

(7) administer loans made by the state under the provisions of this part; and

(8) approve plans for a proposed solid waste management system submitted by a local government.

<u>(9) provide a procedure for local governments to determine if solid waste management systems should be operated by local government or private industry.</u>

Section 3. Section 75-10-106, MCA, is amended to read:

"**75-10-106. Duties of board.** The board shall:

(1) adopt a state solid waste management and resource recovery plan after complying with the procedures outlined in 75-10-111; and

(2) adopt rules necessary for the implementation of this part, including but not limited to rules governing the following:

(a) submission of plans for a solid waste management system;

(b) procedures for determining if a waste management system should be managed by a local government or private industry.

~~(b)~~ (c) the procedures to be followed in applying for and making loans and grants;

~~(c)~~ (d) the requirements for eligibility for grants; and

~~(d)~~ (e) the agreements between the local government and the department for grants and loans under this part."

NEW SECTION. **Section 4. {standard} Saving clause.** [This act] does not affect rights and duties that matured, penalties that were incurred, or proceedings that were begun before [the effective date of this act].

NEW SECTION. **Section 5. Extension of authority.** Any existing authority to make rules on the subject of the provisions of 75-10-204 is extended to the provisions of [this act].

NEW SECTION. **Section 6. {standard} Effective date.** [This act] is effective on October 1, 1991.

-END-

Appendix J

LC798

**** Bill No. ***

Introduced By **********

By Request of the Environmental Quality Council

A Bill for an Act entitled: "AN ACT TO REQUIRE SOLID WASTE MANAGEMENT SYSTEMS TO OBTAIN A LICENSE EACH YEAR FROM THE DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES, AND TO REQUIRE EACH APPLICANT FOR A LICENSE TO PAY AN APPLICATION FEE; AUTHORIZING THE DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCE TO COLLECT FEES; AMENDING SECTIONS 7-13-231, 75-10-102, 75-10-115, 75-10-204, AND 75-10-221; PROVIDING AN APPROPRIATION; PROVIDING A RETROACTIVE APPLICABILITY DATE; AND PROVIDING A JULY 1, 1991 EFFECTIVE DATE."

STATEMENT OF INTENT

A statement of intent is required for this bill to: (1) provide the department of health and environmental sciences with guidelines for adopting rules to implement [sections 1 through 8]; (2) indicate the structure and amount of fees that are intended to be charged to license solid waste management systems; and (3) indicate the method of collection.

(a) License applications for a new solid waste management system, or substantial modifications to existing systems, will be charged a fee for review of the application. The fees should be based on the capacity of the proposed system and reflect the

relative cost of reviewing the proposal. The following fee structure is suggested:

(i) Major facility. $10,000 for a facility with a planned capacity of more than 25,000 tons of solid waste per year.

(ii) Intermediate facility. $7,500 for a facility with a planned capacity in excess of 5,000 tons per year but less than 25,000 tons per year.

(iii) Minor facility. $5,000 for a facility with a planned capacity of less than 5,000 tons per year.

(b) Solid waste management systems will be charged an annual fee to establish and renew their licenses. The fees are intended to reflect a minimal base fee related to the fixed costs of an annual inspection and permit renewal, and a volume fee related to the estimated amount of solid waste to be disposed of each year. The following fee structure is suggested:

(i) Major facility. $3500 for a facility with a planned capacity of more than 25,000 tons of solid waste per year.

(ii) Intermediate facility. $3000 for a facility with a planned capacity in excess of 5,000 tons per year but less than 25,000 tons per year.

(iii) Minor facility. $2,500 for a facility with a planned capacity of less than 5,000 tons per year.

(c) In addition to the fixed fee, all solid waste systems shall pay a volume fee in order to receive a license under 75-10-221. The initial fee shall not exceed $.72 per ton.

For the purposes of estimating the volume for small solid waste systems or for systems that choose not to weigh or measure

the volume of waste managed, the following formulas are suggested:

(i) Solid waste should be assumed to be generated at the following per capita rates:

Incorporated Places (population)	Tons Per Year
Greater than 5,000	1.04
1,000 - 5,000	0.59
Less than 1,000 and unincorporated areas	0.41

(i) For the purpose of conversion between solid waste weight and volume, the following equivalents are suggested:

(A) One uncompacted cubic yard equals 300 pounds;

(A) One compacted cubic yard equals 700 pounds.

Be it enacted by the Legislature of the State of Montana:

Section 1. Section 7-13-231, MCA, is amended to read:

"**7-13-231. Authorization for charges for services.** (1) To defray the cost of maintenance and operation of said refuse disposal district, the board shall establish a fee for service, with approval of the county commissioners, provided a public hearing has been held if written protest has been made as provided in 7-13-211. An increase in fees may not be approved and implemented unless notice of such increase is given as provided in 7-13-208(1) and (2) and opportunity for protest is allowed as provided in 7-13-209 and 7-13-211.

(2) This fee shall be assessed to all units in the district that are receiving a service, for the purpose of maintenance and operation of said district."

(3) No opportunity for protest or hearing is required to increase fees for the purpose of paying fees imposed by the department of health and environmental sciences under 75-10-115. Notice must be provided to all units of the rate or portion of any rate that is directly attributable to the fee imposed.

Section 2. Section 75-10-102, MCA, is amended to read:

"**75-10-102. Public policies.** (1) To implement this part, the following are declared to be public policies of this state:

(a) Maximum recycling from solid waste is necessary to protect the public health, welfare, and quality of the natural environment.

(b) Solid waste management systems shall be developed, financed, planned, designed, constructed, and operated for the benefit of the people of this state.

(c) Private industry is to be utilized to the maximum extent possible in planning, designing, managing, constructing, operating, manufacturing, and marketing functions related to solid waste management systems.

(d) Local governments shall retain primary responsibility for adequate solid waste management with the state preserving those functions necessary to assure effective solid waste management systems throughout the state.

(e) Revenues for the management and regulation of solid waste management systems should be paid by those generating solid waste in an manner that encourages reduction of the solid waste stream.

~~(e)~~ (f) Encouragement and support be given to individuals and municipalities to separate solid waste at its source in order to maximize the value of such wastes for reuse.

~~(f)~~ (g) The state shall provide technical advisory assistance to local governments and other affected persons in the planning, developing, financing, and implementation of solid waste management systems.

~~(g)~~ (h) Actions and activities performed or carried out by persons and their contractors in accordance with this part shall be in conformity with the state solid waste plan.

(2) This part is in addition and supplemental to any other law providing for the financing of a solid waste management system and does not amend or repeal any other law."

Section 3. Section 75-10-104, MCA, is amended to read:

"**75-10-104. Duties of department.** The department shall:

(1) prepare a state solid waste management and resource recovery plan for submission to the board;

(2) prepare rules necessary for the implementation of this part for submission to the board, including but not limited to rules:

(a) governing the submission of plans for a solid waste management system;

(b) governing procedures to be followed in applying for and making loans;

(c) governing agreements between a local government and the department for grants or loans under this part;

(d) establishing, for the purpose of determining the solid waste management fee to which a facility is subject under 75-10-115, methods for determining or estimating the amount of solid waste incinerated or disposed of at a facility; and

(e) providing procedures for the quarterly collection of the solid waste management fee provided for in 75-10-115~~; and~~.

~~(f) providing guidelines for a waiver of fees for certain incineration or disposal of solid waste, as provided for in 75-10-115(2);~~

(3) provide financial assistance to local governments for front-end planning activities for a proposed solid waste management system which is compatible with the state plan whenever financial assistance is available;

(4) provide technical assistance to persons within the state for planning, designing, constructing, financing, and operating a solid waste management system in order to insure that the system conforms to the state plan;

(5) provide front-end organizational loans for the implementation of an approved solid waste management system whenever funds for loans are available;

(6) enforce and administer the provisions of this part;

(7) administer loans made by the state under the provisions of this part; and

(8) approve plans for a proposed solid waste management system submitted by a local government."

Section 4. Section 75-10-115, MCA, is amended to read:

"75-10-115. Solid waste management fee. ~~(1) Except as provided in subsections (2) and (3), any person who owns an incinerator that burns more than 1,000 tons of solid waste a year or a solid waste disposal facility that is licensed pursuant to 75-10-221 and rules adopted under 75-10-221 and that disposes of more than 1,000 tons of solid waste a year shall pay to the department a quarterly fee of $1 for each ton of solid waste generated in a different region and incinerated or disposed of at the facility.~~

~~(2) The fee provided in subsection (1) must be waived if the department finds that the incineration or disposal is consistent with state solid waste management goals and results in equivalent or improved protection of Montana's public health, safety, welfare, and environment when compared to the alternative of intraregional incineration or disposal.~~

~~(3) The incineration or disposal of solid waste at a licensed facility in the manner and quantity incinerated or disposed of before May 22, 1989, is exempt from the solid waste management fee.~~

(1) The department may establish and collect fees for the management and regulation of solid waste disposal.

~~(4)~~ (2) All fees collected must be deposited in the solid waste management account provided for in 75-10-117."

Section 5. Section 75-10-204, MCA, is amended to read:

"75-10-204. Powers and duties of department. The department shall adopt rules governing solid waste management systems which shall include but are not limited to:

(1) requirements for the plan of operation and maintenance that must be submitted with an application under this part;

(2) the classification of disposal sites according to the physical capabilities of the site to contain the type of solid waste to be disposed of;

(3) the procedures to be followed in the disposal, treatment, or transport of solid wastes;

(4) the suitability of the site from a public health standpoint when hydrology, geology, and climatology are considered;

(5) requirements relating to ground water monitoring, including but not limited to:

(a) information that owners and operators of municipal solid waste landfills and other disposal sites specified in 75-10-207 must submit to the department to enable the department to prepare the priority compliance list authorized by 75-10-207(3);

(b) the content of plans for the design, construction, operation, and maintenance of monitoring wells and monitoring systems; and

(c) recordkeeping and reporting; ~~and~~

(6) The renewal of solid waste management system licenses and related fees;

(7) Fees related to the review of solid waste management system license applications; and

~~(6)~~ (8) any other factors relating to the sanitary disposal or management of solid wastes."

Section 6. Section 75-10-221, MCA, is amended to read:

"**75-10-221. License required -- application.** (1) Except as provided in 75-10-214, no person may dispose of solid waste or operate a solid waste management system without a license from the department.

(2) The department shall provide application forms for a license as provided in this part.

(3) The application shall contain the name and business address of the applicant, the location of the proposed solid waste management system, a plan of operation and maintenance, and such other information as the department may by rule require."

(4) The license provided for in [this section] will be for a period not to exceed 12 months unless renewed by the department. The department may provide exceptions to the 12 month requirement for a two year period following [the effective date in this act].

(5) The department may require submission of a new application if the department determines that the plan of operation, management of the solid waste system, geological or groundwater conditions have changed since the previous license was approved.

(6) In establishing fees for licenses and the review of applications, the department shall consider the volume of waste to be managed and the size of the proposed solid waste management system. Such fees shall encourage reduction in the volume of waste to be managed and the costs to the department of initially reviewing and annually licensing the solid waste management system.

NEW SECTION. **Section 7. Appropriation.** There is appropriated to the department of health and environmental sciences from the solid waste management account under 75-10-117, $504,920 for fiscal year 1992, and $530,730 for fiscal year 1993.

NEW SECTION. **Section 8. Retroactive applicability.** [This act] applies retroactively, within the meaning of 1-2-109, to all applications as provided in 75-10-221 received after January 1, 1990.

NEW SECTION. **Section 9. Effective date.** [This act] is effective on July 1, 1991.

-END-

Appendix K

SOLID WASTE DIVISION - RECOMMENDED BUDGETS, FY1992 AND 1993

	FTE	Function	FY 1992	FY 1993
BASE EXPENDITURES				
Program Manager	1.00	Administer Solid Waste	$35,045	$35,045
Solid Waste Inspector	0.50	License & inspect landfills	$14,002	$14,002
Attorney	0.16	Solid waste rules & enforcement	$6,296	$6,296
Clerk	0.25	Solid waste support	$5,668	$5,668
Clerk	0.50	Solid waste support	$10,282	$10,282
Water Monitor	1.00	Monitor ground water data	$27,781	$27,781
Adjust to LFA Budget			$224	$147
total Personal Services			$99,298	$99221
Program Operations			$85,343	$85,484
Total Base Expenditures	3.41		$184,641	$184,705
Revenues for Base				
General Fund			$184,641	$184,705
Solid Waste Fees			$0	$0
Total Revenue			$184,641	$184,705
MODIFIED EXPENDITURES				
Phase 1:				
Solid Waste Inspector	0.50	Current workload inspection	$13,890	$13,890
Licensing / Inspector	2.00	Sub Title D	$27,780	$55,560
Solid Waste Clerical	0.50	Sub Title D records & reports	$8,480	$8,480
Operations			$59,588	$60,215
Total Phase 1	3.00		$109,738	$138,145
Phase 2:				
Accounting Clerk	0.50	Collection of permit fees	$12,400	$12,400
Allocation of Admin Costs	0.75	Pay share of admin. salaries	$25,000	$25,000
Planner / technician	1.00	Integrated Waste Information	$13,890	$27,781
Planner / technician	1.00	Special Wastes & incineration	$27,781	$27,781
Data Manager	1.00	Create & run four data bases	$24,800	$24,800
Attorney	0.84	New rules, enforcement & EIS	$31,480	$31,480
Operator Trainer	1.00	Training required by EPA	$27,780	$27,780
Clerical Support	0.50	Support for additional staff	$10,280	$10,280
Operations			$72,000	$88,000
Total Phase 2	6.59		$245,411	$275,302
Total Phases 1&2			$355,149	$413,447
Solid Waste Plan			$60,000	$30,000
TOTAL ALL EXPENDITURES	13.00		$599,790	$628,152
Revenue Needed:				
General Fund			$184,641	$184,705
Solid Waste Fees			$429,362	$429,362
Total Revenue			$614,003	$614,067
Fees Generated (at $.31/ton plus base fees)			$429,362	$429,362
Fees Needed			$415,149	$429,234
Year end Balance of fees			$14,213	$128

Appendix L

LC796

**** Bill No. ***

Introduced By **********

By Request of the Environmental Quality Council

A Bill for an Act entitled: "AN ACT FOR THE CODIFICATION AND GENERAL REVISION OF LAWS RELATING TO SOLID WASTE MANAGEMENT BY LOCAL GOVERNMENTS; AUTHORIZING MULTI-COUNTY SOLID WASTE DISTRICTS; AMENDING SECTIONS 7-5-2306, 7-5-4304, 7-5-4321, 7-7-2501, 7-7-4402, 7-13-202, 7-13-204, 7-13-209, 7-13-212, 7-13-215, 7-13-232, 7-13-233, 7-13-235, MCA; REPEALING SECTIONS 7-13-241 THRU 7-13-243, AND 7-13-2401 THRU 7-13- 2406, MCA; AND PROVIDING A JULY 1 EFFECTIVE DATE."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MONTANA:

Section 1. Section 7-5-2306, MCA, is amended to read:

"**7-5-2306. Use of installment purchase contracts.** When the amount to be paid as the purchase price for any vehicle or road machinery of any kind, for any other machinery, apparatus, appliance, or equipment, or for any materials or supplies of any kind shall exceed $4,000, the county governing body may provide for the payment of such purchase price in installments extending over a period of not more than 5 years, <u>except contracts for solid waste management systems as defined by 75-10-103 which may not exceed ten years,</u> provided that at the time of entering into the agreement for such purchase, there shall be an unexpended

balance of appropriation in the budget for the then-current fiscal year available and sufficient to meet and take care of such portion of the purchase price as is payable during the then-current fiscal year and the budget for each following year in which any portion of such purchase price is to be paid shall contain an appropriation for the purpose of paying the same."

Section 2. Section 7-5-4304, MCA, is amended to read:

"**7-5-4304. Certain contracts to be submitted to voters.** No contract may be let pursuant to 7-5-4302 that extends over a period of 5 years or more, except contracts for solid waste management systems as defined in 75-10-103 which may not exceed ten years, without first submitting the question to a vote of the

Section 3. Section 7-5-4321, MCA, is amended to read:

"**7-5-4321. Grant of exclusive franchise -- election required.** (1) The council may not grant an exclusive franchise or special privilege to any person except in the manner specified in subsection (2). The powers of the council are only those expressly prescribed by law and those necessarily incident thereto.

(2) No exclusive franchise for any purpose, except contracts for solid waste management systems as defined in 75-10-103 which may not exceed ten years, may be granted by any city or town or by the mayor or city council thereof to any person, association, or corporation without first submitting the application therefor to the electors of the city."

Section 4. Section 7-7-2501, MCA, is amended to read:

"7-7-2501. **Authority to issue revenue bonds -- refunding revenue bonds.** (1) A county may issue county revenue bonds in the same manner and with the same effect as provided in chapter 7, part 44, of this title for issuance of municipal revenue bonds. County revenue bonds may be issued to finance any project or activity enumerated in chapter 16, part 21, Title 75, chapter 10 part 1 or chapter 34, part 22 or 23, of this title. Revenues from the project for which the bonds are issued are the only revenues upon which a lien under the provisions of 7-7-4431 shall apply. No lien shall attach to other revenues or other property within the county.

(2) A county may refund revenue bonds issued under the authority provided in subsection (1) by the method provided in either part 45 or part 46 of chapter 7.

(3) In construing, for purposes of this section, the provisions of parts 44, 45, or 46 of chapter 7, "municipal" is considered to refer to the county and "governing body" is considered to refer to the board of county commissioners whenever the board of county commissioners is acting pursuant to subsection (1)."

Section 5. Section 7-7-4402, MCA, is amended to read:

"7-7-4402. **Definitions.** Whenever used in this part, unless a different meaning clearly appears from the context, the following definitions apply:

(1) The term "governing body" shall include bodies and boards, by whatsoever names they may be known, having charge of finances and management of a municipality.

(2) The term "municipality" shall include any city or any town, however organized.

(3) The term "undertaking" shall mean any one or a combination of the following:

(a) water and sewer systems, together with all parts thereof and appurtenances thereto including but not limited to supply and distribution systems, reservoirs, dams, and sewage treatment and disposal works;

(b) public airport construction and public airport building;

(c) convention facilities;

(d) public recreation facilities; and

(e) public parking facilities, solid waste management systems, or other revenue-producing facilities and services authorized in these codes for cities and towns."

Section 6. Section 7-13-202, MCA, is amended to read:

"**7-13-202. Definitions.** As used in this part, unless the context indicates otherwise, the following definitions apply:

(1) "Board" means the board of directors as provided for in 7-13-213~~ and 7-13-241~~.

(2) "Commissioners" means the board of county commissioners.

(3) "Family residential unit" means the residence of a single family.

(4) ~~"Refuse" means all putrescible and nonputrescible solid wastes (except body wastes), including garbage, rubbish, street cleanings, dead animals, yard clippings, and solid market and~~

~~solid industrial wastes.~~ "Solid waste" means all putrescible and nonputrescible wastes, including but not limited to garbage, rubbish, refuse, hazardous wastes, ashes, sludge from sewage treatment plants, water supply treatment plants, or air pollution control facilities; septic tank and cesspool pumpings; construction and demolition wastes; dead animals, including offal; discarded home and industrial appliances; wood wastes and inert materials; but does not include municipal sewage, industrial wastewater effluents, or mining wastes as regulated under the mining and reclamation laws administered by the department of state lands.

(5) ~~"Refuse disposal district" means an area established with definite boundaries for the purpose of collecting and disposing of all refuse created in said district."~~ "Solid waste district" means an area established within a county for the purpose of collecting and disposing of all solid waste created in the district.

NEW SECTION. **Section 7. Change in terms.** In the provisions of the Montana Code Annotated 7-13-200 through 7-13-243, the term "refuse" is changed to "solid waste" and the term "refuse disposal" changed to "solid waste management".

Section 8. Section 7-13-204, MCA, is amended to read:

"7-13-204. Resolution of intention to create refuse disposal district. (1) Before creating any refuse disposal district, the commissioners shall pass a resolution of intention to do so.

(2) The resolution shall designate:

(a) the proposed name of such district;

(b) the necessity for the proposed district;

(c) a general description of the territory or lands of said district, giving the boundaries thereof;

(d) the general character of the collection service;

(e) the proposed fees to be charged for the service; and

(f) the powers to be delegated to the board and the powers to be exercised only with the approval of the county commissioners.

(3) Joint solid waste management districts have all powers provided in 75-10-112.

Section 9. Section 7-13-209, MCA, is amended to read:

"**7-13-209. Right to protest.** (1) At any time within ~~30~~ 15 days after the date of the first publication of the notice provided for in 7-13-208, any owner of property liable to be assessed for said service may make written protest against the proposed service or against the fees proposed to be charged for the service.

(2) Such protest must be in writing and be delivered to the county clerk, who shall endorse thereon the date of the receipt

Section 10. Section 7-13-212, MCA, is amended to read:

"**7-13-212. Resolution creating district -- power to order improvements.** (1) Before ordering any of the proposed improvements, the commissioners shall pass a resolution creating the refuse disposal district in accordance with the resolution of intention theretofore introduced and passed by the commissioners.

(2) The commissioners may change the boundaries and

description of the district from the resolution of intention if such changes do not add territory or increase the proposed fees.

~~(2)~~ (3) The commissioners shall be deemed to have acquired jurisdiction to order improvements immediately upon the occurrence of one of the following:

(a) when no protests have been delivered to the county clerk within ~~30~~ 15 days after the date of the first publication of the notice provided for in 7-13-208;

(b) when a protest shall have been found by said commissioners to be insufficient; or

(c) when a protest shall have been overruled."

Section 11. Section 7-13-215, MCA, is amended to read:

"**7-13-215. Powers and duties of board.** ~~The board of a refuse disposal district established and organized under this part has the following powers and duties, with the approval of the county commissioners of the counties involved:~~

~~(1) to develop and administer a program for the collection or disposal of refuse in the district;~~

~~(2) to employ personnel;~~

~~(3) to purchase, rent, or execute leasing agreements for such equipment and material necessary for carrying on an effective refuse collection or disposal program;~~

~~(4) to cooperate with any corporation, association, individual, or group of individuals, including any agency of the federal, state, or local government, in order to carry out effective programs;~~

~~(5) to receive gifts, grants, or donations for the purpose of advancing the program and to acquire by gift, deed, purchase, or condemnation land necessary for refuse disposal purposes;~~

~~(6) to enforce department of health and environmental sciences or local board of health rules pertaining to the storage, collection, and disposal of refuse;~~

~~(7) to apply for and receive from the federal government or the state government, on behalf of the refuse disposal district, money appropriated by federal or state legislative bodies for aiding these programs;~~

~~(8) to borrow from any loaning agency funds available for assistance in planning or financing a refuse disposal district and repay these with the money received from the fees levied under this part."~~ Except for powers specifically reserved by the counties in the resolution creating the district, the board has the powers and duties provided in 75-10-112. The board of a joint solid waste district provided for in [section 20] shall have all powers and duties provided in 75-10-112.

Section 12. Section 7-13-232, MCA, is amended to read:

"7-13-232. Determination of service charge. ~~(1) The fees shall be based upon a family residential unit, and fees for commercial and industrial accounts shall be based on the comparison with a typical residential unit as to volume and type of waste produced.~~

(1) The board may establish, by resolution, rates for service charges. For districts other than joint districts, the

rates must be subject to the approval of the county commissioners.

(2) Service charges may take into account:

(a) the character, kind and quality of service; and

(b) the cost of providing the service, including but not limited to depreciation and the payment of principal and interest on money borrowed by the district for the acquisition and improvement of facilities and equipment.

(3) Service charges may be based upon a family residential unit, size of vehicle, volume, weight, cost, or incentives or penalties for waste management practices.

(4) The initial rate for any solid waste district or joint district must not exceed the rate provided in the resolution creating the district.

~~(2)~~ (5) Fees for mobile home park accounts must be paid by the registered owner of each mobile home in the mobile home park.

~~(3) In no case shall the fee for disposal service exceed one-half the total fee for both collection and disposal services."~~

(6) A notice of intention to enact a resolution to increase rates must be published as provided in 7-1-4128, and the district shall provide for a public hearing prior to the meeting at which the resolution is considered.

Section 13. Section 7-13-233, MCA, is amended to read:

"7-13-233. Procedure to collect service charge. ~~The month the service begins, the department of revenue or its agents shall insure that the amount of this fee is placed on the tax notices,~~

~~to be collected with the tax. If a property owner fails to pay this fee, it shall become a lien upon the property."~~ (1) The service charge may be imposed for any fiscal year for which the district establishes a budget or incurs costs related to planning or constructing a solid waste management facility or for services to begin within 12 months.

(2) The board shall certify to the county commissioners of the county served by the solid waste district the service charge needed for the current fiscal year, due but unpaid service charges, and a description of the property against which the service charges are to be levied.

(3) The department of revenue or its agent shall insure that the amount of the service charge is placed on property tax notices and that the service is collected with property taxes. If a property owner fails to pay the service charge, it becomes a lien upon the property.

(4) The board may establish a system for collecting service charges other than by tax notices to property owners by the department of revenue. The board may collect the service charge more often than property taxes are collected.

(5) If not paid, the service charge becomes delinquent and becomes a lien on the property, subject to the same penalties and the same rate of interest as property taxes.

Section 14. Section 7-13-235, MCA, is amended to read:

"**7-13-235. Installment payments for capital improvements.** To defray the initial cost of purchasing land and equipment, payments may be spread over a term of not to exceed 20 years.

~~Payments are to be made in equal installments out of the money received from the fee levy provided for in this part.~~"

NEW SECTION. **Section 15. Bonds and obligations.** (1) The commissioners may issue revenue bonds, including refunding bonds, or borrow money for the acquisition of property, construction of improvements, purchase of equipment or to pay costs related to planning, designing and financing solid waste management systems.

(2) Revenue bonds may be issued in a form and upon such terms as provided in 7-7-2501.

(3) Bonds or loans may be payable from any revenues of the joint solid waste district, including revenues from:

(a) service charges authorized in [section 13];

(b) taxes levied pursuant to [section 17];

(c) grants or contributions from state or federal government; or

(d) other sources.

NEW SECTION. **Section 16. Board to certify deficiency.** The board shall certify annually to the commissioners the amount of principal and interest for the next fiscal year. The board shall certify to the counties the amount of any deficiency that may exist for the ensuing period of one year for the payment of principal and interest due on any outstanding bonds for which the district's revenues are pledged.

NEW SECTION. **Section 17. County tax levy.** The county commissioners may levy a tax on all property in the solid waste district for the purpose of paying a deficiency certified by the

board. The commissioners may levy a tax not to exceed two mills if a deficiency is certified by the board.

NEW SECTION. **Section 18. Purpose.** To provide safe, efficient and effective management of solid waste, two or more counties are authorized to cooperate in the creation of a joint solid waste district. A joint solid waste district is a political subdivision of the state for the purposes of the municipal finance consolidation act as provided in 17-5-16 and for solid waste management services as provided in 75-10-112.

NEW SECTION. **Section 19. Definitions.** As used in [sections 18 through 31], the following definitions apply:

(1) "Joint District" means a joint solid waste district created through the procedures outlined in [sections 18 through 31].

(2) "Board" means the board of directors as provided in [section 22].

(3) "Counties" means the commissioners of the counties creating the joint district.

NEW SECTION. **Section 20. Creation of a joint district.** Two or more counties may create a joint solid waste district through the procedures described in 7-13-203 through 7-13-212.

NEW SECTION. **Section 21. Municipalities authorized to contract with joint districts.** Joint districts may enter into agreements to provide solid waste disposal, but not collection, services to municipalities located in adjoining counties that do not participate in the district. Any such agreement shall be

subject to the approval of the county commissioners in the county in which the municipality is located.

NEW SECTION. **Section 22. Board of directors.** (1) The board of a joint solid waste district shall be appointed by the counties.

(2) The county commissioners shall appoint one commissioner from each county, a representative of each incorporated city or town, a representative of each county or city board of health, and any other representative agreed to by the commissioners of all the counties creating the joint district.

(3) Any municipality which contracts for solid waste services with a joint solid waste district but is not located in the counties creating the joint district may be represented on the board as provided in the agreement with the joint district.

(4) The board may provide for an executive committee that has the authority to exercise all powers of the joint district, except that the entire board shall meet at least once a year to elect officers and select the executive committee. Any executive committee shall include at least one representative from each of the counties.

NEW SECTION. **Section 23. Administration of funds in a joint district.** Fees and other moneys collected by a joint solid waste district may be administered either by entering into an agreement with the county treasurer's office of one of the participating counties or through a fund established and administered by the board. Any fees received by a county treasurer must be promptly

deposited into the funds and accounts established by the joint district.

NEW SECTION. **Section 24. Powers and duties of the board.** The board has the powers and duties provided in 75-13-233.

NEW SECTION. **Section 25. Service charges.** Service charges must be established and collected in the manner provided in 7-13-231 through 7-13-233.

NEW SECTION. **Section 26. Bonds and obligations.** (1) A joint solid waste district may borrow money for any purpose provided in [sections 18 through 31] and issue bonds, including refunding bonds, in such a form and upon such terms as it may determine, payable from any revenues of the joint district, including revenues from:

(a) service charges authorized in [section 25];

(b) taxes levied pursuant in [section 28];

(c) grants or contributions from state or federal government; or,

(d) other sources.

(2) The bonds may be issued by resolution of the joint district without an election and without any limitation of the amount, except that no bonds may be issued at any time if the total amount of principal and interest to become due in any year on such bonds and on any then outstanding bonds for which revenues from the same source or sources are pledged exceeds the amount of the revenues to be received in that year as estimated in the resolution authorizing the issuance of the bonds. The board shall take all action necessary and possible to impose,

maintain, and collect rates, charges, rentals and taxes, if any are pledged, sufficient to make the revenues from the pledged source in a year at least equal to the amount of the principal and interest due in that year.

(3) The bonds may be sold at public or private sale and may bear interest as provided in 17-5-102. Except as otherwise provided in [sections 18 to 31], any bonds issued pursuant to [this chapter] by a joint district may be payable in principal and interest solely from revenues of the joint solid waste district and must state on their face the applicable limitations or restrictions regarding the source from which the principal and interest are payable.

(4) Bonds issued by a joint district under [sections 18 through 31] are to be issued for an essential public and governmental purpose by a political subdivision within the meaning of 15-30-111(2)(a).

(5) For the security of any bond, the joint solid waste district may by resolution make and enter into any covenant, agreement, or indenture. The sums required from time to time to pay principal and interest and to create and maintain a reserve for the bonds may be paid from any revenues referred to in [this chapter], prior to the payment of current costs of operation and maintenance of the solid waste management system.

NEW SECTION. **Section 27. Board to certify deficiency.** The board shall certify annually to the counties the anticipated revenue of the joint solid waste district and the amount of principal and interest for the next fiscal year. The board shall

certify to the counties the amount of any deficiency that shall exist for the ensuing period of one year for the payment of principal and interest due on any outstanding bonds of the joint district.

NEW SECTION. **Section 28. County tax levy.** The counties participating in a joint solid waste district may levy a tax on all property in the joint solid waste district for the purpose of paying any deficiency certified by the board as provided in this part:

(1) The counties may agree by resolution to levy a tax not to exceed two mills if a deficiency is certified by the board;

(2) The counties may levy a general tax for payment of any deficiency if the question of levying a general tax is submitted to the qualified electors of each of the counties creating the joint solid waste district as provided in Title 7, chapter 7, part 22. No tax may be imposed unless the majority of voters voting on the levy in each county approve the levy.

NEW SECTION. **Section 29. Debt service fund.** A joint solid waste district may create a debt service fund and accumulate in it a sum not to exceed an amount equal to the total amount of principal and interest due in any two subsequent years.

NEW SECTION. **Section 30. Tax exemption.** Any property in this state acquired by a joint solid waste district for purposes of operating a solid waste management system and any income derived by the joint district is exempt from taxation to the same extent as other property used for public purpose.

NEW SECTION. **Section 31. Repealer.** Sections 7-13-241 thru 7-13-243, and sections 7-13-2401 thru 7-13-2406, MCA, are repealed.

NEW SECTION. **Section 32. Codification instruction.** [Sections 18 thru 31] are intended to be codified as an integral part of Title 7, chapter 13, and the provisions of Title 7, chapter 13, apply to [sections 18 thru 31].

NEW SECTION. **Section 33. Saving clause.** [This act] does not affect rights and duties that matured, penalties that were incurred, or proceedings that were begun before the date of [this act].

NEW SECTION. **Section 34. Severability.** If a part of [this act] is invalid, all valid parts that are severable from the invalid part remain in effect. If a part of [this act] is invalid in one or more of its applications, the part remains in effect in all valid applications that are severable from the invalid applications.

* NEW SECTION. **Section 35. Applicability to joint solid waste disposal.** Joint refuse disposal districts organized under 7-13-241 prior to the effective date of [this act] are continued under [sections 18 through 31] and have all powers and duties of joint solid waste districts provided by [sections 18 through 31].

NEW SECTION. **Section 36. Applicability to garbage and ash collection districts.** (1) The duties and responsibilities of garbage and ash collection districts that exist within the boundary of a municipality shall be assumed by the municipality on the effective date of [this act].

(2) Garbage and ash collection districts outside a municipality shall become a solid waste district, or part of an existing solid waste district, upon passage of a resolution by the county commission:

(a) the resolution must provide for compliance with the provisions of Title 7, chapter 13, part 2, as amended;

(b) if the boundaries and service charges for the new district remain the same as for the garbage and ash collection district, no notice of intention or right to protest, as provided in 7-13-208 through 7-13-211, need be provided.

NEW SECTION. **Section 37. Effective date.** [This act] is effective on July 1, 1991.

-END-

Appendix M

LC802

**** Bill No. ***

Introduced By **********

By Request of **********

A Bill for an Act entitled: "AN ACT ESTABLISHING MANAGEMENT STANDARDS FOR INFECTIOUS WASTE; AND AUTHORIZING PROFESSIONAL AND OCCUPATIONAL BOARDS TO IMPOSE ANNUAL FEES.

Be it enacted by the Legislature of the State of Montana:

STATEMENT OF INTENT

A statement of intent is required for this bill because [section 6] extends rulemaking authority to the department of health and environmental sciences and to professional licensing boards. It is the intent of the legislature that these regulations must be designed to protect public health, safety and welfare and the environment and must be developed in consideration of the best current technical information and the needs of Montana's medical service community.

NEW SECTION. **Section 1. Short title.** [This act] may be cited as the "Infectious Waste Management Act".

NEW SECTION. **Section 2. Purpose.** The purpose of [this act] is to protect the public health and welfare of the citizens of Montana by developing and implementing infectious waste management policies that are reasonable, cost-effective, aesthetically pleasing and environmentally acceptable.

NEW SECTION. **Section 3. Definitions.** As used in [sections 1 through 6], the following definitions apply:

(1) "Department" means the department of health and environmental sciences provided for in Title 2, chapter 15, part 21.

(2) "Generator" means an individual, firm, facility or company that produces infectious waste.

(3) "Infectious" means capable of producing disease. In order to be infectious, the following four factors simultaneously must be present:

(a) virulence; microorganisms capable of causing disease must be present;

(b) dose; microorganisms must be present in a quantity sufficient to cause infection;

(c) portal of entry; there must be an opening or route of access into a human body; and

(d) host susceptibility; the host's natural resistance must be incapable of preventing infection.

(4) "Infectious waste" means waste capable of producing infectious disease. Infectious waste includes but is not limited to the following:

(a) cultures and stocks of infectious agents and associated biologicals;

(b) human pathological waste including tissues, organs and body parts that are removed during surgery or autopsy;

(c) free flowing waste human blood and products of blood including serum, plasma and other blood components and items soaked or saturated with blood; and

(d) sharps that have been used in patient care, medical research, or industrial laboratories.

(5) "Sharps" means any discarded health care article that may cause punctures or cuts, including but not limited to needles, scalpel blades, and broken glass that may be contaminated with blood.

(6) "Steam sterilization" means a treatment method for infectious waste utilizing saturated steam within a pressure vessel (known as a steam sterilizer, autoclave, or retort) at times lengths and temperatures sufficient to kill infectious agents within the waste.

(7) "Storage" means the actual or intended containment of wastes, either on a temporary or a long-term basis.

(8) "Transportation" means the movement of infectious waste from the point of generation to any intermediate points and finally to the point of ultimate treatment or disposal.

(9) "Treatment" means the application of a method, technique, or process, including incineration, designed to render infectious waste sterile.

NEW SECTION. **Section 4. Prohibition.** A person may not treat, store, transport or dispose of infectious waste in a manner inconsistent with the provisions of [sections 1 through 6] or rules adopted under the provisions of [sections 1 through 6].

NEW SECTION. **Section 5. Management standards.** Infectious waste must be managed in compliance with the following standards:

(1) Separated from ordinary waste at the point of origin by separate, distinct containers with bio-hazard labels until the waste is rendered non-infectious;

(a) sharps must be contained for storage, transportation, treatment and subsequent disposal in leakproof, rigid, puncture-resistant containers that are taped closed or tightly-lidded to prevent loss of contents;

(b) infectious waste other than sharps must be contained in disposable containers or bags that are impervious to moisture and have a strength sufficient to preclude ripping, tearing, or bursting under normal conditions of use. The bags must be securely tied so as to prevent leakage or expulsion of solid or liquid wastes during storage, handling or transport;

(2) Storage prior to treatment must inhibit the spread of infectious agents;

(a) storage areas must be secured to deny access to non-authorized personnel;

(b) waste must be clearly identified as infectious;

(c) liquid or semi-solid waste not disposed of under [subsection (4)(c)] must be stored in a manner consistent with [subsection 2].

(3) Handling must preclude compaction or other mechanical manipulation that provides an opportunity for release of infectious agents.

(4) Treatment and disposal must be by the following methods:

(a) incineration that provides complete combustion to carbonized or mineralized ash;

(b) steam sterilization that renders the waste noninfectious;

(c) discharge of liquid or semi-solid waste into a sewer system that provides secondary treatment, or into a primary treatment sewage system if waste is first sterilized by chemical treatment;

(d) sterilization by standard chemical techniques;

(e) sterilization by any scientifically proven techniques approved by state and federal authorities; or,

(f) disposal of fetal remains or recognizable body parts except teeth by incineration or internment.

(5) If infectious waste has been rendered noninfectious by one of the methods listed in [subsection 4] and is no longer biologically hazardous, it may be mixed with and disposed with ordinary waste under the following conditions:

(a) steam sterilized waste must be labeled with heat sensitive tape or bagged in marked, autoclavable bags; and,

(b) chemically treated waste or waste treated under [section (4)(e)] must be appropriately labeled.

(6) Infectious waste may be transported by the generator, municipal solid waste service or regulated commercial hauler to an off-site treatment facility if waste is confined in a leakproof non-compacting and fully enclosed vehicle compartment.

(7) Infectious waste may be disposed of in a properly operated landfill licensed under 75-10-221, MCA, provided that it has been treated by one of the methods in [subsection 4].

(8) Untreated infectious waste may be disposed of at a licensed, properly operated landfill by separate burial without compaction and with minimum disturbance until April 1, 1993.

(9) Each employee who handles or manages infectious waste must receive training adequate to insure safe performance of duties.

(10) Generators and transporters of infectious waste shall develop a contingency plan to handle spills and equipment failure.

NEW SECTION. **Section 6. Licensing and regulation.**

(1) Each board or department of the state that licenses a profession, occupation or health care facility that generates infectious waste shall require each such licensee to comply with [sections 1 through 6] of this act as a condition of licensure. The board or department shall adopt rules to implement [this act] and may adjust or impose annual fees commensurate with costs of regulation.

(2) Each profession, occupation or health care facility that generates, transports or operates treatment, storage or disposal facilities subject to [sections 1 through 6] that is not licensed by a board or department under [subsection 1] must obtain an annual permit from the department. The department shall adopt rules to carry out [this act] and may establish an

annual fee commensurate with the costs of regulation. The fees must be deposited in the solid waste management account.

NEW SECTION. **Section 7. Effective date.** [This act] is effective October 1, 1991.

-END-

Appendix N

LC792

**** Bill No. ***

Introduced By **********

By Request of **********

A BILL FOR AN ACT ENTITLED: "AN ACT REQUIRING OIL RETAILERS TO DISPLAY A SIGN INDICATING THE LOCATION OF THE NEAREST WASTE OIL COLLECTOR."

WHEREAS, under new federal regulations most crankcase oil is expected to be classified as hazardous; and

WHEREAS, the use of waste or used oil or other material that is contaminated with dioxin or any hazardous material is prohibited for use as a dust suppressant under 40 CFR 266.40; and

WHEREAS, other means of disposal are available, including re-refining and burning.

STATEMENT OF INTENT

A statement of intent is required for this bill in order for the department of health and environmental sciences to adopt rules to implement [section 1]. The department shall develop an oil recycling sign to be displayed in retail stores, and shall distribute it to oil retailers.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MONTANA:

NEW SECTION. **Section 1.** Each retailer offering motor oil for sale must visibly display at an appropriate location within

the retail store a sign indicating the location of the nearest waste oil collector.

-END-

Appendix O

LC797

**** Bill No. ***

Introduced By **********

By Request of Environmental Quality Council

A BILL FOR AN ACT ENTITLED: "AN ACT TO EXTEND THE MORATORIUM ON CERTAIN INTERSTATE TRANSPORT OF SOLID WASTE; AMENDING SECTION 75-10-209, MCA."

WHEREAS, the state of Montana presently is faced with proposals to import out-of-state solid waste for disposal in Montana; and

WHEREAS, additional time is needed to adequately develop and staff the department of health and environmental sciences regulatory program for solid waste; and

WHEREAS, the department of health and environmental sciences must promulgate administrative rules necessary to implement the "mega-landfill siting act" (LC800); and

WHEREAS, the Montana solid waste management plan is being rewritten to incorporate the principals of integrated waste management and to reduce the waste stream in Montana;

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MONTANA:

Section 1. Section 75-10-209, MCA, is amended to read:

"75-10-209. Moratorium on certain interstate transport of solid waste. (1) The state of Montana recognizes the importance of providing for disposal or incineration of solid waste in a

manner that protects Montana's public health, safety, welfare, and environment. Although the state of Montana also recognizes that, under appropriate conditions, the transportation of out-of-state solid waste into Montana may not conflict with this goal, it is imperative that the state undertake a legislative study of solid waste regulation and management, further develop regional and statewide solid waste management goals, plans, and regulations, and adopt rules implementing the solid waste management fee before allowing solid waste importation beyond current levels.

(2) Except as provided in subsection (3), a person may not transport solid waste into Montana for incineration or disposal until October 1, ~~1991~~ 1993.

(3) A person who transported solid waste into Montana before May 22, 1989, may continue to transport solid waste into Montana subject to the limitation that the amount he transports into Montana during any calendar year of the moratorium does not significantly exceed the amount he transported into Montana during calendar year 1988."

-END-