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MINUTES OF THE <u>SENATE</u> COMMITTEE ON	ENERGY & NATURAL RESOURCES
The meeting was called to order by	SENATOR MERRILL WERTS at Chairperson
8:00 a.m. A. February 6	, 19_85n room <u>123-S</u> of the Capitol.
All members were present except: Senator Ben Vidricksen - Excused	

Committee staff present:

Ramon Powers - Research Department Don Hayward - Revisor's Office Nancy Jones - Committee Secretary

Conferees appearing before the committee:

Barbara Sabol - Secretary, Department Health & Environment

Malcolm Moore - Sierra Club

Marsha Marshall - Kansas Natural Resource Council

- Kansas Engineering Society Bill Henry

Chairman Werts called the meeting to order and directed the committee members' attention to S.B. 1 - Prohibiting the underground burial of hazardous waste.

Secretary Sabol presented a review of the bill. (Attachments A and B). Emphasis was given to reasons the department supports the bill and she suggested amendments the committee might consider. The testimony given was based on the principal assumption that the State of Kansas cannot afford to risk the contamination of its groundwater by the below-ground burial of hazardous wastes. Ground water is a valuable resource, the quality of which must be protected by any means available to us. Secretary Sabol pointed out the strenghs of SB 1 as it now reads which the Department supports for passage

There are a number of suggestions for which consideration is being asked by the Department:

1. Recommend that establishment of a board be deleted from sections.

2. Provide assurances in the bill that the working "no economically reasonable or technologically feasible methodology exists for the disposal of a particular hazardous waste" would apply both to the applicant and the state.

3. Amend to clearly state that criminal penalties are subject to per day penalties, with addition of the following language: "Any person who knowingly violates any provisions of paragraphs (i) to (ii) inclusive, of subsection (a) shall be guilty of a class C felony and, in the case of a continuing violation, every day such violation continues shall be deemed a separate violation, and upon conviction thereof shall be punished as provided by law."

4. Provide for citizen intervention in cases brought by county or

district attorneys or by the Attorney General.

Items 3 and 4 in the form of amendments would eliminate the issue of statutory equivalency with RCRA and would overcome the last hurdle identified by EPA which is delaying the delegation of the RCRA program to the state of Kansas.

Secretary Sabol requested further that SB 1 be amended on Line 89 by adding the words "or disposal" following the word"management"; also, that the word "board" should be replace wherever used by the word "council" or "commission".

Chairman Werts asked Secretary Sabol to give an example of the sort of person who might desire to intervene in a criminal action. Secretary Sabol replied this might be any interested or concerned citizen of Kansas and there would be no limitations.

In response to a question from Senator Martin about the establishing of a review board, Senator Kerr, Chairman of the Interim Committee, responded that the philosophical reason for establishing a review board was to provide a broad range of input when considering whether exceptions should be made.

been transcribed verbatim. Individual remarks as reported herein have not been submitted to the individuals appearing before the committee for editing or corrections.

CONTINUATIO IEET

MINU	TES OF THE _	SENATE	COMMITTEE ON	ENERGY	& NATURAL	RESOURCES	,
room	123-S Stateho	use at 8:00	a.m./ছcxn. on	Februar	_{cv} 6		, <u>1985</u>

Malcolm Moore gave testimony for the Sierra Club stating that they strongly oppose the underground burial or landfilling of hazardous waste since experience clearly indicates that land burial of hazardous waste is not a viable disposal alternative. Technology to reduce or treat the majority of hazardous waste exists today and there are several out-of-state firms already doing business here. A number of options now exist for hazardous waste generators. Mr. Moore suggested that establishment of the proposed seven member "underground hazardous waste disposal board" is not necessary considering the cost involved and the fact that the Department of Health & Environment has a well qualified staff to assist in making determinations. (Attach. C).

Marsha Marshall presented testimony for the Kansas Natural Resource Council which supports the ban of underground burial of hazardous waste with a strong commitment to protect groundwater resources. The Council recommends that mound landfill, above-ground storage, land treatment and underground injection of hazardous waste not be recognized in the bill as alternative disposal methods. The Council believes prohibition to be the most responsible action as protection of the quality of groundwater is vital to the future of this state. (Attachment D).

Senator Hayden asked if there was testimony on the other side of the question before the interim committee, as to whether there were feasible alternatives for exceptions that would arise. Senator Kerr stated this is an important point and testimony from the Department of Health & Environment during the interim hearings was that there would probably be exceptions and KDHE should be able to resolve those questions. After all possible treatments of waste have been utilized, it is possible there will still remain an inert residue that would be defined as hazardous. Secretary Sabol agreed with Senator Kerr and added there are ways of handling such hazardous wastes other than underground burial and means would have to be provided using the standard of the most economic and least burdensome method for all concerned.

Bill Henry of the Kansas Engineering Society stated that they are proponents of SB 1, with two reservations. The first reservation is in the language of new section 1(a) "such prohibition shall not be construed as prohibiting mound landfill -- land treatment --." They feel these forms of disposal are susceptible to misuse as unregulated underground burial of hazardous waste. There is no regulatory language which either defines or regulates mound landfill. The Society suggests mound landfill and land treatment references in the bill be removed. The second concern deals with the appointee members of the proposed Underground Disposal Review Board. They feel that the appointments to be made by the House and Senate Leadership as well as the Governor should be people who are technically qualified, and the appointing authorities should be so advised. The intent should be that these appointees would be selected based upon their technical expertise and background. Senator Werts suggested that if all the appointees were technical experts, this would tend to limit the board's capability to make an economic evaluation. Mr. Henry understands this but feels there should be experts in all areas. (Attach. E).

Concern was expressed by several committee members that the responsibility and powers of the Secretary of the Department of Health & Environment would be substantially impaired with the creation of a review board. The feeling was also expressed that with a review board, there perhaps would be excessive searching for particular exceptions. Mr. Henry acknowledged that this was certainly likely with the creation of a board. Senator Martin stated that his position is that he would like to have the Secretary directly responsible for the decisions. Chairman Werts reminded the committee that discussion on the bill would be held later.

Meeting was adjourned at 8:50 a.m. The next meeting will be February 7,1985.

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KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT

TESTIMONY ON SB 1

PRESENTED TO Senate Energy and Natural Resources Committee, January 1985

This is the official position taken by the Kansas Department of Health and Environment on SB 1.

BACKGROUND INFORMATION:

In the past few years, particularly since the implementation of the Resource Recovery and Conservation Act (RCRA) in 1980, the state-of-theart in hazardous waste management has been evolving such that alternatives to landfills are available for hazardous wastes. At the same time, a growing body of information has indicated significant problems with the process of landfilling hazardous wastes. The Environmental Protection Agency (EPA) recognized these problems when the agency proposed regulations concerning land disposal in the February 5, 1981 Federal Register. The register states, "There is good theoretical and empirical evidence that the hazardous constituents which are placed in land disposal facilities very likely will migrate from the facility into the broader environment. This may occur several years, even many decades, after placement of the waste in the facility, but data and scientific prediction indicate that, in most cases, even with the application of best available land disposal technology, it will occur eventually." The Office of Technology Assessment (OTA), a branch of the U.S. Congress, also recognized the peril inherent in land disposal of hazardous wastes. In a 1983 summary, Technologies and Management Strategies for Hazardous Waste Control, OTA stated, "even well intentioned and presently accepted waste management practices, particularly the use of landfills...., might still constitute substantial threats. These threats arise from the potential slow leakage of waste constituents or leachate through the soil and into the groundwater."

The State of Kansas cannot afford to risk the contamination of its groundwater by the below ground burial of hazardous wastes. Groundwater must be treated as a valuable resource to be protected by any means available to us. For example, 772 cities in Kansas presently rely upon groundwater as their sole water supply. Large quantities of groundwater are also utilized for agricultural purposes in the state. The costs for restoring or containing groundwaters contaminated by below ground burial of hazardous wastes will far outweigh the expense which will be borne by Kansas industry required to use alternative methods of disposal. The State of Kansas and the nation as a whole has learned a great deal about the management of solid and hazardous wastes in the seventeen years since the passage of the Federal Solid Waste Management Act. We still have much more to learn, however, and protecting such a valuable resource as the groundwater of the State of Kansas requires us to be prudent in our regulatory program.

S. EXNR 2/6/85 ATRACHMENT A

The Kansas Legislature recognized the danger we face when it enacted K.S.A. 65-3443 in 1981. Under K.S.A. 65-3443, the Secretary of KDHE has the authority to study alternatives to land burial for specific types of hazardous waste. If alternatives are available for a specific type of hazardous waste, the Secretary may order that the use of land burial for that waste be discontinued. However, conducting such studies for every specific category of hazardous waste generated in Kansas would require a tremendous commitment of time and financial resources.

It should be mentioned that the 1984 amendments to RCRA signed by the President on November 8, 1984, now provide a national statutory mandate that the land disposal of hazardous waste must be banned unless EPA determines that the prohibition of one or more methods of underground burial is not required in order to protect human health and the environment. EPA must review and decide within 66 months whether to allow continued underground burial of each specific hazardous waste. Therefore, it is now a national policy that continued reliance on underground burial of hazardous waste be reduced and the best interests of Kansas will be well served if we take action now instead of waiting for EPA to make their determinations during the next $5\frac{1}{2}$ years.

STRENGTHS:

- 1. Provides clear direction for future management of hazardous waste in Kansas by eliminating regulatory burden on the Secretary to ban each hazardous waste on a case by case basis.
- 2. Encourages development of alternatives to underground burial of hazardous waste.
- 3. Provides for reasonable exceptions to the ban if it can be demonstrated that no economically reasonable or technologically feasible methodology exists for the disposal of a particular hazardous waste.
- 4. Provides long term protection of the public health and environment by assuring secure management of hazardous waste.

WEAKNESSES:

None.

DEPARTMENT'S POSITION:

The department believes that SB 1 addresses a critical issue confronting Kansas and supports its passage. We do, however, have a number of suggestions or issues for which we ask your consideration:

1. We believe the technical evaluation of requests for exceptions to the prohibition of below ground burial can best be handled by KDHE staff with the final decision resting with the Secretary. Therefore, we recommend that establishment of the board be deleted from SB 1.

- We would also like to have assurances in the bill that the 2. wording "no economically reasonable or technologically feasible methodology exists for the disposal of a particular hazardous waste" starting on Line 68 addresses not only what is economically reasonable for the person submitting the request for exception but also what is economically reasonable on behalf of the state's interest. This would include such factors as cost to the state for post-closure care or monitoring and the potential for costs associated with failure of the below ground containment system. The test for "economically reasonable" should consider the potential long term costs of allowing land burial of a hazardous waste (with its particular mobility, toxicity, or other characteristics) rather than taking a narrow perspective only upon the front-end costs of utilizing alternative disposal methods.
- 3. As a result of a November 27, 1984 public hearing on the department's application to EPA for final RCRA authorization, two problems with current statutory authority were identified which will delay EPA granting authorization to KDHE. We would suggest that SB 1 be amended to also include the following:
 - a. K.S.A. 65-3441(c) be amended to clearly state that criminal penalties are subject to <u>per day</u> penalties by adding the following language:
 - "Any person who knowingly violates any provisions of paragraphs (i) to (ii), inclusive, of subsection (a) shall be guilty of a class C felony and, in the case of a continuing violation, every day such violation continues shall be deemed a separate violation, and upon conviction thereof shall be punished as provided by law."
 - b. Amend K.S.A. 65-3450 as follows to also provide citizen intervention in cases brought by county or district attorneys or by the attorney general:

"If the secretary, county or district attorney, or attorney general brings civil enforcement action pursuant to this act, any person who has an interest which is or may be adversely affected, upon timely application, shall be allowed to intervene in such action pursuant to K.S.A. 60-224, and amendments thereto."

These two amendments would eliminate the issue of statutory equivalency with RCRA and would overcome the last hurdle identified by EPA which is delaying the delegation of the RCRA program to the state of Kansas.

4. We would also suggest that Line 89 of SB 1 be amended by adding the word disposal as follows:

"the secretary may order the person to modify the generation, accumulation or, management or disposal of the hazardous waste..."

This would merely serve to provide parallel language to that found in Line 83 of the same bill.

- 5. On line 78 we suggest the following additional language:

 "....party aggrieved by the issuance of or the failure to issue an order...."
- 6. Statutory conflicts will be created by the use of the word "Board" to designate the "underground hazardous waste disposal review board" in S.B. 1. K.S.A. 65-3430(a) defines Board to mean the hazardous waste disposal facility approval board. Thus, without significant change to the hazardous waste statutes, K.S.A. 65-3430 et. seq. the word board as used in S.B. 1 should be deleted. We would recommend that the word council or commission be used to replace board wherever it is used in S.B. 1.

In conclusion we strongly encourage your support of S.B. 1 and consideration of the issues listed above. Prohibition of below ground burial would establish the state's leadership in providing protection to our environment and our valuable groundwater resources in particular.

Presented by: Barbara J. Sabol, Secretary Kansas Department of Health

and Environment

ADDENDUM TO TESTIMONY DOCUMENT ON S.B. 1

Alternatives to Land Burial for Hazardous Waste

- a. The optimal waste management strategy is <u>source reduction</u> or waste elimination. This usually involves changes in industrial processes so that hazardous by-products are not produced or produced in smaller quantities. In some cases raw material substitution can result in waste reduction. Generators have also discovered that separation of wastes for recycle or treatment instead of mixing them together can be an effective means for reducing the total volumes of hazardous waste requiring disposal.
- b. Recycling or reuse, the second best approach, offers opportunities for reducing dependence on landfill disposal.

 Recycling includes any activity which converts waste materials into new products or an energy resource. Examples of on-site recycling include the filtering of waste solvents so they can be used again and the reuse of metal plating liquids after removal of solid residues/sludges. Waste exchanges, such as the Midwest Industrial Waste Exchange, are an option for waste generators to locate potential buyers of their wastes. One person's waste may be another person's raw material.
- c. Numerous <u>treatment</u> processes have been developed that either reduce toxicity, reduce the volume of the hazardous waste or render the material completely innocuous. These are considered as the third most preferable alternative. These treatment techniques use physical, chemical and biological methods. Oftentimes these treatment methods are used in sequence or selectively to handle a variety of influent wastes.
- d. <u>Incineration</u> is a treatment technology which significantly reduces the volume of hazardous wastes, and in many cases actually destroys their hazardous characteristics. Because incineration may involve the potential release to the environment of significant hard-to-destroy wastes (either through air emissions or solids/ashes left over from combustion), it must be closely regulated and monitored to assure that it is an environmentally acceptable treatment alternative. The technology to control the air emissions from such hazardous waste incinerators does exist and has been satisfactorily demonstrated in EPA supervised tests.
- e. Warehousing of labeled wastes in sealed containers could be implemented for wastes that are not readily amenable to the above mentioned alternatives. In some cases, it may develop that recovery of constituents such as heavy metals in such stored wastes would become an economically viable alternative at some future date.

SELNR 2/6/85 ATTACHMENT B

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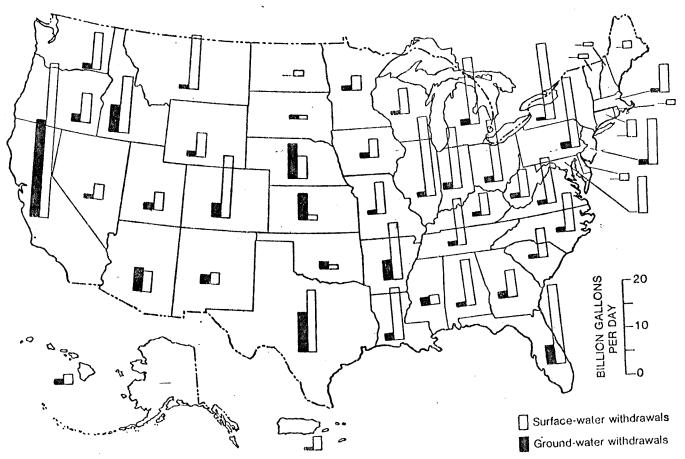


FIGURE 12. Withdrawals from ground water and surface water, by State, 1980. (From Solley and others, 1983.)



Kansas Chapter

Testimony Presented to the
Senate Energy and Natural Resources Committee
on February 6, 1985, Regarding
Senate Bill Number 1

My name is Malcolm Moore, Lobbyist for the Kansas Chapter of the Sierra Club. Thank you for the opportunity to present testimony on Senate Bill No. 1 (prohibition of underground burial of hazardous waste).

The terms "Love Canal" and "Times Beach" have been etched into the American vocabulary as code words for environmental disaster. Just as those code words have been etched into the American vocabulary, so too has the NIES facility near Furley, Kansas been etched into the Kansas vocabulary as code words for environmental disaster. Past and current hazardous waste management practices pose significant and widespread environmental risks. They also pose substantial risks of liability for injuries and cleanup. The country has come to realize that the hazardous wastes we have been generating as part of our modern, post-World War II economy pose serious environmental dangers and compliance problems that are perhaps equal to or greater than the traditional problems associated with air and water pollution combined.

The U.S. Environmental Protection Agency has estimated that approximately 57 million metric tons of hazardous waste are produced annually in the United States. Of this volume of waste, only 10 percent is deemed by E.P.A. to be handled in an environmentally acceptable way. Everyone is at risk from improper disposal of the hazardous waste generated each year in the U.S. Of the estimated 32,000 to 50,000 land disposal sites where such waste has been disposed in the U.S., at least 2,000 pose significant environmental/health dangers and warrant quick, effective remedial action. No one knows exactly how many such sites there are in Kansas, however, estimates indicate there are 200 to 300 sites in which hazardous waste may have been or currently is being disposed of.

The Kansas Chapter of the Sierra Club <u>strongly</u> opposes the underground burial or landfilling of hazardous waste. This disposal option has been in wide spread use in the past, primarily because it represents the least cost option. The evidence is clear though, that this once thought, least cost option, is not a least cost option when viewed, as it should, in terms of the long term costs to both industry and the public. Our experience in Kansas clearly indicates that land burial of hazardous waste is not a viable disposal alternative.

The technology to reduce or treat the majority of all hazardous waste exists today. Research is not needed to initially develop these methods. In fact, as was documented this past summer by the Kansas Special Committee on Energy and Natural Resources, the alternative technologies already exist in and near the State of Kansas. Several out-of-State firms are already doing business here. At the summer hearings, representatives of these companies pointed out that they can make a profit even when they transport wastes to plants 300 miles away.

S. ELNR 2/6/85 ATTACHMENT C Kansas Chapter of the Sierra Club Testimony on Senate Bill No. 1 February 6, 1985 Page No. 2

The Kansas Chapter of the Sierra Club believes that several options exist which provide alternatives for hazardous waste generators: (1) The optimal waste management strategy is source reduction or waste elimination, through process modification; (2) the second best approach would be recycling or reuse; (3) third, treatment processes to reduce toxicity and volume; (4) fourth, incineration; and (5) as a last resort the use of above ground storage facilities (warehousing of labeled wastes in sealed containers, etc.) for wastes that are not amenable to the above mentioned alternatives.

The Kansas Chapter of the Sierra Club strongly endorses Senate Bill No. 1 as a progressive, much needed statutory amendment to prohibit the underground burial of hazardous waste in the State of Kansas. As the bill provides: exceptions to the prohibition could be granted if it is demonstrated that, except for underground burial, no economically reasonable or technologically feasible technology exists for the disposal of a particular hazardous waste.

On behalf of the Kansas Chapter of the Sierra Club, I would, however, like to recommend that the establishment of the proposed seven member "underground hazardous waste disposal review board" is <u>not</u> necessary; as the responsibility for deciding whether or not an exception to the prohibition should be granted for a particular hazardous waste, should logically be the responsibility of the Secretary of the Kansas Department of Health and Environment. We believe that the Department of Health and Environment has well qualified staff to assist the Secretary in making such determinations, and that the establishment of such a board and the provision for compensation, subsistence allowance, mileage and other expense reimbursement would be an unnecessary use of state funds, as well as duplicate staff functions of the Department of Health and Environment. We would therefore, recommend that the bill be modified such that the proposed review board not be formed and that the Secretary of the Department of Health and Environment be given the responsibility of the proposed review board.

Again, thank you very much for the opportunity to express our views.

Malcolm Moore, Lobbyist Kansas Chapter of the Sierra Club

Kansas Natural Rource Council

Testimony

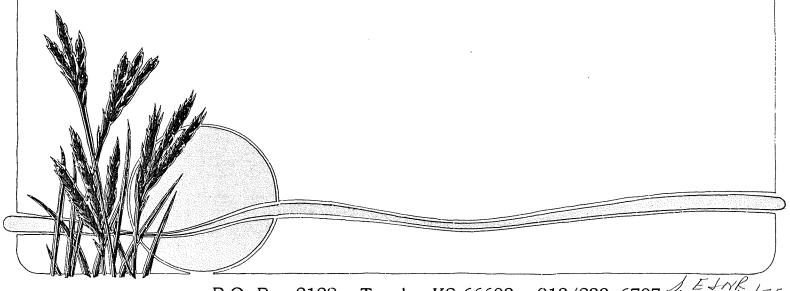
before the

Senate Energy and Natural Resources Committee

on

SB 1

Presented by Marsha Marshall February 6, 1985



P.O. Box 2128 • Topeka, KS 66603 • 913/233-6707 ATTACHMENT

My name is Marsha Marshall and I represent Kansas Natural Resource Council, a non-profit public interest organization which advocates sustainable energy and natural resource policies.

We support the ban of underground burial of hazardous waste. Legislative work during the last year at both the federal and state level indicates a growing commitment to strictly regulate the disposal of hazardous waste. This commitment is based upon the intention to protect groundwater resources. Our commitment is especially strong in Kansas where over 80% of the people in the state depend upon groundwater for their source of supply, the highest percentage in the nation. Senate Bill #1 is a natural step in developing policy to protect the state's most valuable resource.

Recommendations

Mound landfill, above-ground storage, land treatment and underground injection of hazardous waste are excluded in this bill from the ban. We do not believe that it is your intent to endorse all of these other methods of disposal, some of which are relatively new and untested. However, the way the bill is worded could be construed as legislative approval of these alternatives. Language to state your intent to exclude from the ban but not to endorse these alternative disposal methods would clarify the legislation.

In addition, we urge you to consider carefully the merits or need of a review board whose duty would be to decide whether or not an exception to the prohibition against underground burial of hazardous waste shall be granted. Setting up a special board implies that we as a state are planning exceptions to the ban. Testimony before the interim committee this summer suggests that such exceptions are unnecessary in view of other feasible treatment and disposal technologies. Further, a review board designed to consider exceptions to the ban clouds the state's commitment to protect groundwater, the reason for this legislation in the first place.

As legislators, you may be reluctant to issue a prohibition since it limits future options for disposal of hazardous waste. However, we believe a prohibition to be the most responsible action. Protecting the quality of groundwater is vital to the future of this state. In comparison, concern for the future of and uncertain and possibly dangerous method of hazardous waste disposal is unnecessary and unwarranted.



Kansas Engineering Society, Inc. 216 West Seventh, P.O. Box 477 Topeka, Kansas 66601 (913) 233-1867

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William M. Henry Executive Vice President Testimony for the Senate Energy & Natural Resources Committee
Wednesday, February 6, 1985
by the
Kansas Engineering Society

Mr. Chairman, members of the committee, I am Bill Henry, Executive Vice President of the Kansas Engineering Society, and I appear before you today as a proponent of Senate Bill 1 on behalf of the Kansas Engineering Society's 1200 members.

As the study of the problem of hazardous waste has evolved in recent years we have learned more each year that enlightens us in this area. The major keystone to KES's policy in this area is that nearly all hazardous waste should be treated so as to render it inert or harmless before subjecting it to underground disposal.

We feel that Senate Bill 1 agrees with our philosophy in this area and that Senate Bill 1 further gives the Secretary certain flexibility to allow for exceptions when such exceptions are deemed environmentally safe and where this is no technological option available except underground burial.

Our enthusiasm for Senate Bill 1 must be tempered with certain reservations however. Our first reservation is in the language of new section 1(a). Specifically, at lines 27 though 30 we question the language which states "such prohibition shall not be construed as prohibiting mound landfill...or land treatment..."

Those of you who served on the interim committee this past summer may recall Janis Butler, P.E., Salina testifying about our reservations as to mound landfill or land treatment. First, as you may know, we have no federal definition or any other legal definition of what mound landfill is.

We feel that these two forms of handling of hazardous waste are as susceptible to misuse as the unregulated undergound burial of hazardous waste. To set them aside as particular exceptions to the prohibition is to sign off and give them an inference of acceptability.

If you will look at RICA as well as our current state statutes you will find that we have no regulatory language which either defines or regulates mound landfill.

S.EXNR 2/6/85 ATTACHMENT D According to members of our society who have studied these two areas they have found that land treatment has rarely worked successfully. Now, what is land treatment. Statutorialy it is defined at KSA 1984 supp. 65-3430(w) The process of land treatment is where wastes are worked or plowed into the soil. The theory is that the waste will interact with the soil to biodegrade these wastes. This theory works well in the fact that most oily wastes can be broken down and are absorbed by the soil. The problem with this method of treatment is that most oily wastes have heavy metals that remain in the soil such as chromium and lead. And while the original waste may decompose the heavy metals do not. They remain and may migrate from the soil into ground water supplies.

The members of our society do not find the exception reference to aboveground storage or underground injection of hazardous waste as problem areas. There is federal law and definitions in state regulatory sections dealing with underground injection of hazardous waste as well as regulation of above ground storage which should adequately protect the environment and citizens of Kansas.

If the committee would so choose it might wish to remove the reference to "mound landfill" and "land treatment" from section 1. Such action striking this language would not necessarily prohibit the use of these particular alternatives but would expose these particular treatment measures to the same regulatory review that will exist for the underground burial of hazardous waste.

Our second concern, which we would share with the committee today, deals with the appointed members of the proposed Underground Disposal Review Board. Two of the members, the Secretary, and the State Geologist are natural picks for this committee and by virtue of their offices and background will probably have expertise in dealing with this area. We would hope that the five other appointments which would be made by members of the Senate and House leadership as well as the Governor would also be directed to have people who are technically qualified in this area to serve. We would hope this committee might reflect in its own minutes that the intent is that these appointees would be selected based upon their technical expertise and background to serve on this committee.

The society appreciates the opportunity to share its remarks with you today and will be happy to respond to any questions now or in the future.

Respectfully submitted,

William M. Henry

Executive Vice President Kansas Engineering Society