

MINUTES OF THE Senate COMMITTEE ON Energy and Natural Resources

The meeting was called to order by Senator Charlie L. Angell at
Chairperson

8:00 a.m./~~pm~~ on Tuesday, March 27, 1984 in room 123-S of the Capitol.

All members were present except:

Senator Richard Gannon (Excused)
Senator Paul Hess

Committee staff present:

Ramon Powers, Research Department
Chris Stanfield, Research Department
Don Hayward, Revisor's Office
LaVonne Mumert, Secretary to the Committee

Conferees appearing before the committee:

Representative Mike Meacham
Ralph Hunt, Jr., Wichita Independent Refuse Haulers Association and National Solid Waste Management Association
H. R. Schwendeman, Packaging Corporation of America
Dr. Douglas R. Hahn, Department of Environmental Resources, Wichita
William Franklin, Johnson County
William Henry, Kansas Engineering Society
Barbara Sabol, Secretary, Kansas Department of Health and Environment

Senator Gordon moved that the minutes of the March 21, 1984 meeting be approved. Vice-Chairman Kerr seconded the motion, and the motion carried.

H.B. 3095 - Solid waste resource facilities provided by counties and cities

Representative Mike Meacham said it is possible to burn waste and convert it to a usable form of energy. This is not intended to be a major form of energy production but is intended to address the problem of a shortage of room for landfills. Representative Meacham stated that the bill gives the right to control the flow of waste to cities and counties. He said this should be a protection from an unfavorable court ruling relating to anti-trust laws.

Ralph Hunt, Jr. summarized his written testimony (Attachment 1). He opposes legislated flow control. Mr. Hunt reviewed his suggested amendments (Attachment 2) providing for compensation. He discussed problems of unfair competition. He noted that some contracts have no provisions to allow for recovery of increased tipping fees. Mr. Hunt mentioned that haulers assigned to dump at an incinerator could be disadvantaged if other haulers are allowed to dump at landfills.

H. R. Schwendeman read his written testimony (Attachment 3). He testified that waste paper is utilized in recycling and requested that the phrase: "except that any materials having value as a source for energy generation may not be extracted therefrom" be deleted from lines 62 through 64.

Dr. Douglas H. Hahn presented a slide series illustrating the operation of the incinerator and various examples of such facilities. Answering a question from Senator Roitz, Dr. Hahn said that Sedgwick County intends that such a facility be privately owned and operated and be financially viable. (A packet of material was presented to the Committee by Dr. Hahn which contains lists of cities with resource recovery incinerators and other information on the general subject. The material is on file in the Kansas Legislative Research Department.)

William Franklin (Attachment 4) testified that he was appearing as a citizen and as President of Franklin Associates, a consulting firm, but was not representing anyone else. He favors the bill but would recommend that the change suggested by Mr. Schwendeman be made so that there is no restriction on recovery of waste paper.

William Henry stated that the Kansas Engineering Society supports the bill.

H.B. 2725 - Ground burial of hazardous waste; prohibited

Barbara Sabol summarized her written testimony (Attachment 5). Copies of an article on above ground landfills (Attachment 6) and a map showing the comparison of withdrawals of

Unless specifically noted, the individual remarks recorded herein have not been transcribed verbatim. Individual remarks as reported herein have not been submitted to the individuals appearing before the committee for editing or corrections.

CONTINUATION SHEET

MINUTES OF THE Senate COMMITTEE ON Energy and Natural Resources,
room 123-S, Statehouse, at 8:00 a.m./~~PM~~ on Tuesday, March 27, 1984

groundwater and surface water (Attachment 7) were provided. Ms. Sabol said the primary thrust is the protection of groundwater, and she discussed the hazards to groundwater from below ground burial of hazardous wastes. Responding to a question from Chairman Angell, Ms. Sabol said the bill would not change the current position relating to underground injection which is permissible. Answering questions from Chairman Angell, Ms. Sabol said that although there has never been a charge for the disposal of waste at the Vulcan site, it is becoming apparent that there should be a charge. She said the rationale has been that the activities there are related to clean up.

Senator Gordon requested a list of sites where hazardous waste may have been deposited in Kansas.

The meeting was adjourned at 9:01 a.m. by the Chairman. The next meeting of the Committee will be at 8:00 a.m. on March 28, 1984.

Other attachments are as follows:

Testimony of Maxine Hansen, Wichita-Sedgwick County Regional Planning Commission
(Attachment 8)

Testimony of Richard Cotton, City of Emporia (Attachment 9)

Testimony of Ward Clements, City of Derby (Attachment 10)

Testimony of Edward Elam, City of Mulvane (Attachment 11)

Testimony of Gerald Powell, City of Mulvane (Attachment 12)

Testimony of Charles Vogt, City of Haysville and Rural Mayor's Association of
Sedgwick County (Attachment 13)

Testimony of M. S. "Mitch" Mitchell, Technology Committee of the Resource Recovery
Task Force (Attachment 14)

Testimony of Charles Benjamin, Board of Harvey County Commissioners (Attachment 15)

Testimony of Tom Scott, Board of County Commissioners, Sedgwick County (Attachment 16)

Testimony of Jack Spratt, Board of County Commissioners, Sedgwick County (Attachment 17)

Testimony of Bill Hacker, South Central Kansas Economic Development District (Attach-
ment 18)

Testimony of Margalee Wright, City of Wichita (Attachment 19)

Testimony of Robert Duncan, City of Winfield (Attachment 20)

Minutes of Meeting of Board of County Commissioners of Johnson County (Attachment 21)

Senate Energy & Natural Resources

March 27, 1984

<u>Name</u>	<u>Organization</u>
B. J. SABOL	KDHE
D. R. Hahn	Sedgwick County Dept. of Environmental Resources
M. S. MITCHELL	WICHITA, RESOURCE RECOVERY TASK FORCE SEDG CO DOER
WARD Clements	City of Derby
DWIGHT F. METZLER	Private Consultant
RAY T. Reed Jr	Shelby County Task Force
Matt Selby	Sierra Club
Margine Hansen	Metro Area Plan Com
Jess Cornie	Corning + Sons Waste Systems
Jacquie Heber	A-1 Sanitation Service, Inc.
J. J. Waler	"
Ferny Carday	Johnson Trash Service
Ralph Hunt	Select Senior Franch
Dennis Murphy	KDHE
Richard Cotton	City of Emporia, Ks.
William E. Franklin	Self / Franklin Associates and Johnson County Commissioners
AR Schwendeman	Packaging Corp of America
Rep Hodgen	KCC I
Bill Henry	KS Engineering Society
PAT SCHAFER	BUDGET
Chip Wheelers	Waste Mgmt, Inc.
Chris McKenzie	League of Ks. Municipalities
Von Hlow	GRMC

March 27, 1984

Chairman and Members of the Energy
and Natural Resources Committee:
State Capitol
Topeka, Kansas 66625

As a Solid Waste Collector, Director of the Wichita Independent Refuse Haulers Association, and a member of National Solid Waste Management Association, I have the following Comments to make.

NSWMA is a national trade association which represents over 2,000 private waste service firms in the United States and Canada. They represent the major firms involved in the collection, transportation, disposal and recovery of wastes. Through the Institute of Resource Recovery they represent the major companies which own/operate and develop resource recovery facilities.

The central purpose of this legislation is to allow designated local governments to exercise monopoly control over the solid waste stream within their borders. The only purpose for granting this control is to insure the economic viability of a resource recovery facility. When viewed in this light, flow control can be recognized for what it really is: a public subsidy favoring one waste disposal technology over another. While the development of resource recovery facilities is a laudable goal, and one this association wholeheartedly endorses, we adamantly oppose the approach outlined in this legislation.

We are opposed to legislated flow control because it imposes a monopoly by directing wastes to a specific disposal facility regardless of costs, alternate disposal options or other market considerations such as materials recovery. Consumers benefit by free and open competition among environmentally licensed facilities, not by municipal monopolies such as those supported by flow control. In addition, flow control insulates those waste disposal facilities receiving the benefit of flow control from the discipline of free market forces, removing competitive pressures for efficient operation-- cost overruns can easily be offset by simply increasing the required tipping fee. It is our view that when wastes from a community end up at a sanitary landfill, resource recovery facility, or processing plant, they should do so because it is economical and efficient for the wastes to be disposed of or treated at one of those facilities. Additionally, MSWMA rejects the notion that flow control is necessary to assure the economic viability of a resource recovery project. A look at the several successful resource recovery facilities in operation today illustrates that none are dependent upon flow control to assure the guaranteed waste stream. For example, two facilities have been operating

Atch. 1

Chairman and Members of the Energy
and Natural Resources Committee:

March 27, 1984

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successfully by contracting for the waste stream (RESCO in Saugus, Massachusetts, and Hooker Energy Corporation, in Niagara Falls, New York), and a third facility has attracted a significant portion of its waste stream from the private sector using competitive tipping fees (Resource Recovery, Inc., in Miami, Florida). Moreover, several facility proposals have been able to obtain financing without resorting to the enactment of flow control ordinances (Bresco, Baltimore, Maryland; and Refuse Fuels Associates in Lawrence, Massachusetts).

We are convinced that when the political and economic climate is ripe for resource recovery, such facilities will be constructed. Until then, efforts by the state to force facility development will undoubtedly create serious and unnecessary problems for the private waste management industry.

We urge you to reconsider your legislation.

Respectfully Submitted,



Ralph Hunt, Jr.

(h) COMPENSATION; AFFECTED SOLID WASTE FACILITIES AND SERVICES.

(1) If a licensed collector or an owner or operator of a solid waste disposal or treatment facility is affected adversely, either directly or indirectly, by a special enforcement order, the person may seek compensation by submitting a request to the municipality within 90 days after the person receives notification under sub. (d) (3). The request shall include a statement of the amount of compensation requested. If a person does not submit a request for compensation within this time limit or if the person enters into a contract with the municipality concerning compensation, the person is not entitled to compensation under this subsection.

(2) The owner or operator of a solid waste disposal facility is eligible for compensation under this subsection only if the facility is an approved facility, as defined under Kansas Statutes.

(3) For a solid waste disposal facility which serves only generators within the recycling or resource recovery area, the municipality may elect to compensate the owner by either:

(4) Purchasing the solid waste disposal facility at its fair market value considering the remaining site life computed on the basis of the design capacity, equipment and structures reasonably necessary for the operation of the facility; or

(5) Paying the owner an amount equal to the fair market value of the affected portion of the solid waste disposal facility based upon the percentage the affected portion bears to the remaining site life computed by dividing the original design capacity of the facility into the remaining site life of the facility.

(6) For a solid waste disposal facility which serves generators within and outside the recycling or resource recovery area, the municipality shall compensate the owner by paying an amount equal to the fair marketvalue of the affected portion of the solid waste disposal facility based on the percentage

the affected portion bears to the original site life computed by dividing the original capacity of the facility into the remaining site life of the facility.

(7) For a licensed collector, the municipality shall compensate the collector for additional costs incurred as a result of complying with the special enforcement order. Compensation for a licensed collector under contract is limited to the value of the remaining contract or agreement under which the collector is furnishing collection services at the time the special enforcement order takes effect at the rates in effect at that time adding reasonably anticipated inflationary increases and deducting existing escalator clauses or reduced cost resulting from the imposition of the special enforcement order. Compensation for a licensed collector not under written contract is limited to the value of the additional expenses incurred by the licensed collector to comply with the special enforcement order until such time that compliance with the special enforcement order does not result in increased costs over waste disposal through other available licensed facilities.

Additional costs include but are not limited to:

1. Increased travel expenses resulting from increased travel distances and time.
2. Increased travel expenses resulting from restructuring collection routes.
3. Increased operational expenses.

Name: H.R. Schwendeman

Title: Area General Manager - Paper Stock Group

Company: Packaging Corporation of America
Plant Topeka, Kansas - Annual tons 15,000.

1. Here to testify against Section 1 of Bill prohibiting separating waste paper and other recyclables from solid waste stream.
2. Waste paper is a raw material required by consuming recycle mills to produce new paper and paperboard in lieu of utilizing tree (wood chips).
3. There are many other paper stock dealers who purchase waste paper within the State of Kansas who remove secondary fibres from the solid waste stream such as Boy Scouts, Girl Scouts, churches, schools, trash haulers and environmentalist who utilize the funds realized from the sale of waste paper for very beneficial civic projects. This has been a long time fund raiser for these organizations.
4. Other cities, counties, and states are utilizing scrap paper for burn for energy however, have not included scrap paper - Pinellas, Florida. Pinellas built a large waste to energy plant but certain language protected waste paper from flow control. They found that exemption of waste paper did not effect their operation.
5. Essex County, New Jersey worked extremely hard to increase recycling. They are now recycling 300 tons per day. They will save \$20 million dollars for building burn plant.

6. Statistics indicate that for every ton of reduced capacity in waste to energy plants, you reduce capital for construction cost by \$50,000 to \$80,000.

7. We request that consideration be given to exclude recycled materials from the flow control for burn to energy project.

Mr Chairman and members of the Committee

H.B. 3095 Solid Waste / Resource Recovery ...

Here as a citizen ~~and~~ President of Franklin Associates
My business is in the field of solid waste, hazardous
waste, ~~resource~~^{energy} recovery, recycling esp of paper.

Known throughout the USA, but do not represent anyone
here today, nor will I benefit by legislation

H.B. 3095 is important and is needed so that
a number of communities in Kansas can pursue alternate
disposal techniques to landfill, mainly the recovery of
energy from waste ^{including small generator hazardous wastes.} Therefore I speak wholeheartedly
in support of this bill.

There is however, one troublesome ~~set~~ phrase
which if deleted will strengthen the bill and
will avoid a potential conflict between burning
materials for energy or recycling the materials

Read lines 62 to 64. Amend to delete
bold face amendment on lines 62-64.

This is very restrictive to paper recovery and recycling
because many waste haulers now recover corrugated boxes,
newspapers or office waste in just the manner specified.
What they can recover is potentially valuable and a
real contribution to recycling, but it is insignificant
compared to the total waste available for a trash
to energy plant.

~~This concept~~

I support both paper recycling and energy recovery. They are both alternatives to normal landfill (but not replacements). Projects are being considered in Wichita, Newton, Emporia, Topeka, Lawrence, Leavenworth ^{KC area} ~~and~~ and perhaps some other places I do not know about. Paper recovery takes place nearly everywhere, and ^{now} ~~often~~ is done after it is on a trash truck. Removing the phrase will do no harm to energy recovery and would lift a potential ~~burden~~ conflict and burden to private businesses and recyclers.

I have discussed my concerns with Barbara Sabal and her staff, and with some of the people who need the legislation. They have expressed no objection to removal of this clause.

One final concern: This whole issue has been subject of national attention and litigation all the way to the Supreme Court. Your bill is among the best ~~and~~ I have seen and would likely survive any legal challenges if the phrase I refer to is removed. It should be ~~amended~~ and the passed!

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT
Testimony on H.B. 2725

By
Barbara J. Sabor, Secretary
To
Senate Energy and Natural Resources Committee
March 22, 1984

BACKGROUND:

In the past few years, particularly since the implementation of the Resource Recovery and Conservation Act (RCRA) in 1980, the state-of-the-art 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 intended 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.

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. K.S.A. 65-3443, along with the current 100 kilogram per month small quantity exemption limit, established Kansas as a leader in the management of hazardous wastes.

It appears that the legislature's intent in K.S.A. 65-3443 was to allow the Secretary to prohibit land burial on a case-by-case basis only. Now it is deemed prudent public policy to impose a comprehensive ban on hazardous waste below ground burial with provisions for exceptions on a case-by-case basis. The legislature is the appropriate forum for such a policy decision.

ALTERNATIVES:

There are several alternatives to below ground burial of hazardous waste. They include:

- source reduction or waste elimination to reduce production of hazardous wastes
- recycling or reuse either in-house or through industrial waste exchanges
- treatment processes to render wastes less hazardous or completely innocuous
- incineration to destroy the hazardous constituents or significantly reduce their volume.
- above-ground storage either through long-term warehousing or mound landfills

IMPACTS:

I. Environmental

Since no commercial or industrial below ground hazardous waste landfills are currently operating in Kansas, the immediate impact would be minimal.

The long-term impact is to prevent the construction and operation of any future hazardous waste below ground burial site. This provides the long-term protection for Kansas groundwater.

An exception can be granted by the Secretary upon a demonstration that the particular hazardous waste intended for below ground burial does not pose a present or potential threat to the public health or environment. This will provide a rebuttable presumption against below ground burial of hazardous waste which nevertheless allows flexibility for utilizing such methods in cases where it can be demonstrated to be environmentally acceptable.

- II. KDHE -- The prohibition on below ground burial would eliminate the need for the state to provide costly long-term monitoring and surveillance of such facilities. This initiative will cause the department to take a more active role in aiding industries to find suitable alternatives for disposing of their hazardous wastes. The department will work with trade associations, Chambers of commerce and other entities to develop educational materials and presentations to minimize the impact on industries affected by the proposal. The initiative will also increase activity at existing transportation and alternate treatment and disposal facilities and may provide the impetus for establishment of new ones. This increased activity will call for additional monitoring of such facilities to ensure they are operated in an environmentally sound manner.
- III. Business Impact -- Currently KDHE regulates three classes of hazardous waste generators:

Small Quantity Generator - Generate less than 100 kg/month. Must dispose of waste in permitted sanitary landfills or hazardous waste disposal facilities.

Kansas Generator - Generates more than ~~100~~ kg/month but less than 1000 kg/month. Must dispose of waste in permitted hazardous waste disposal facilities. Exempt from implementation of certain planning and training regulations.

Federal Generator - Generates more than 1000 kg/month. Must dispose of waste in permitted hazardous waste disposal facilities. No exemption from any regulation.

The practice of allowing small generators to dispose of hazardous waste in sanitary landfills over the long term, provides the potential risk of creating a major environmental problem for the next generation. In order to reduce the immediate impact upon the small hazardous waste generators of Kansas (those producing less than 100 kg/month), a phased approach is included which incrementally increases the universe of generators who will be affected by the prohibition. This provides a desirable transition period for the small generators who have previously disposed of their wastes via landfills and provides an appropriate time period for the department to assist these affected industries in implementation of the program.

The department has recently applied for membership in the Mid West Industrial Waste Exchange. This will provide Kansas' industries the opportunity to seek out other uses of their wastes.

Over the long-term, it is anticipated that a major impact upon the business community as a whole is the incentive for use of innovative and environmentally viable alternatives to below ground burial of hazardous waste.

SUMMARY:

All available technical information confirms our belief that below ground burial of hazardous waste is not a viable and secure long-term disposal alternative. No below ground landfill, using the state-of-the-art technology, has been in existence long enough to determine the effectiveness of control features such as liners, leachate collection systems and long term monitoring systems.

There is no persuasive reason to take the risks associated with waiting to determine the ultimate effectiveness of these control features when alternatives to below ground disposal of hazardous waste exist today.

While these alternatives may have a greater short-term cost to industry, the long-term cost to society is tremendous. The Office of Technology and Assessment estimates that the average cost for cleaning contaminated groundwaters ranges from 5 to 10 million dollars a site. So long as below ground burial of hazardous waste exists as a cheaper alternative to other disposal methods, a significant number of industries will avail themselves of that option. For these reasons, it is in the best interest of the citizens of Kansas to institute a comprehensive ban on the below ground burial of hazardous wastes in our state.

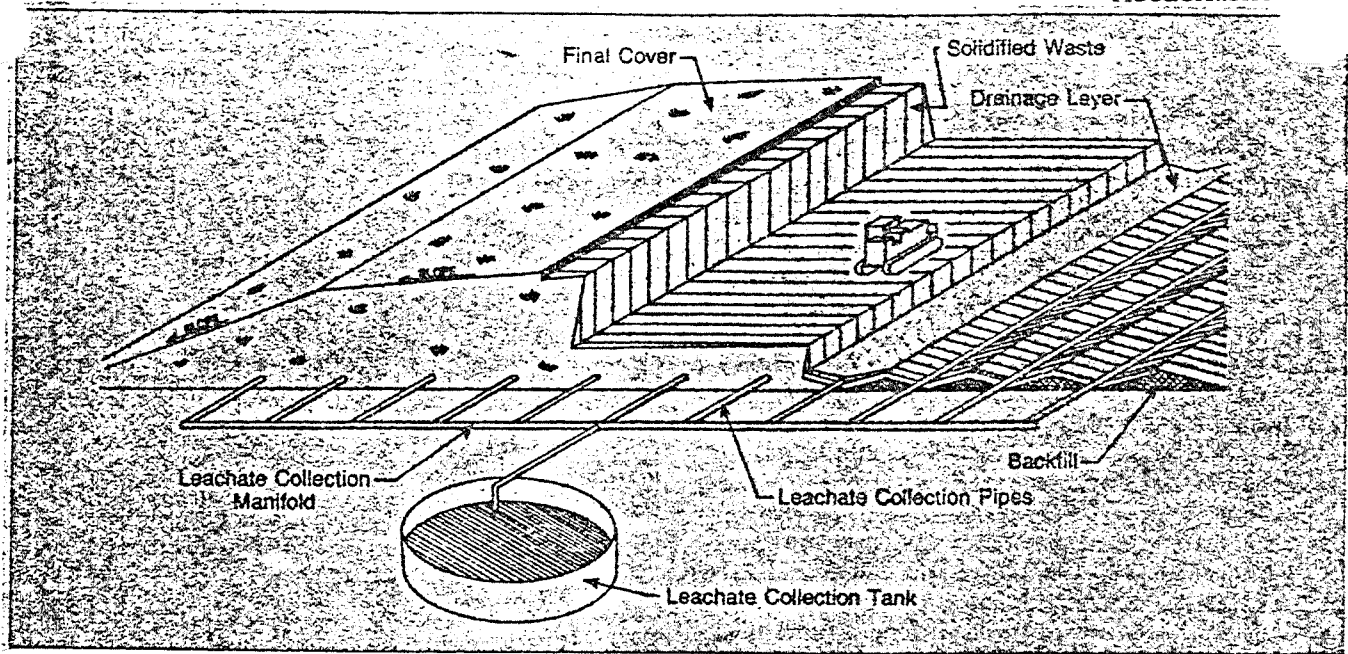


Figure 1. Landfills should be repairable and accessible for future mining of the waste.

The Case for Aboveground Landfills

K W BROWN and D C ANDERSON

Landfills have come a long way from the days of open dumping and ravine-filling. New hazardous waste landfills are required to have leachate collection systems, liners and caps. If properly constructed and maintained, these measures should substantially reduce the short-term quantity of leachate that escapes from a landfill.

Liners, leachate collection systems and caps on belowground landfills may, however, cease to function properly sometime within the first few decades after closure of the landfill. A failed liner or leachate collection system may not be detected or may be impossible to repair without taking drastic measures such as excavation of the waste. These problems can be avoided by constructing landfills above ground and on a sloped, double lined base, Figure 1. The expense of building a sloped base could be avoided by constructing a "hillfill" using gently sloping hills as the landfill base. Much of the technology already developed for existing landfills, including double liners, leachate collection systems, waste stabilization, and caps could be readily adapted to aboveground landfills.

Leachate collection systems

Belowground landfills do not have leachate collection systems designed for continuous leachate removal. Most of these systems cannot remove leachate until the collection pipes are submerged in leachate. Consequently, belowground landfills may well have at least shallow pools of leachate standing on their liners at all times. Thus, leachate will likely accumulate over time. If a leachate collection system fails due to clogging or collapse of the collection pipes, it is extremely difficult to repair.

An aboveground landfill may be constructed with a continuously operating leachate collection system. By simply incorporating a slope in the base of an aboveground landfill, leachate can be continuously removed by gravity. Since all leachate collection pipes are above ground level, they are accessible and serviceable for centuries. The system is also relatively inexpensive because no pumps or labor are required for leachate removal.

With both a drainage layer and collection pipes constructed over the sloped liner, leachate continues to be removed by gravity even if the collection pipes collapse. Consequently, there is little opportunity for other problems to occur, such as seepage through either the liner or sidewalls.

Liners and caps

Flexible membranes and clay are the two primary materials used to construct low permeability landfill liners. Clay liners may be rendered significantly more permeable by exposure to concentrated leachates that hazardous waste may initially release. While flexible membrane liners may have initial low permeabilities, their 10-30 year useful lifetime covers only a fraction of the period during which a landfill may generate contaminated leachate. Any hazardous waste disposal facility would be better off with a double liner system. Figure 2 shows a double liner combination of an upper flexible membrane with an underlying clay liner. Compatibility tests should be used to select the best membrane material for containing waste leachates.

A properly installed and tested membrane liner could probably last at least 10 years if the need to rely on its seams could be eliminated. This would be possible if flexible mem-

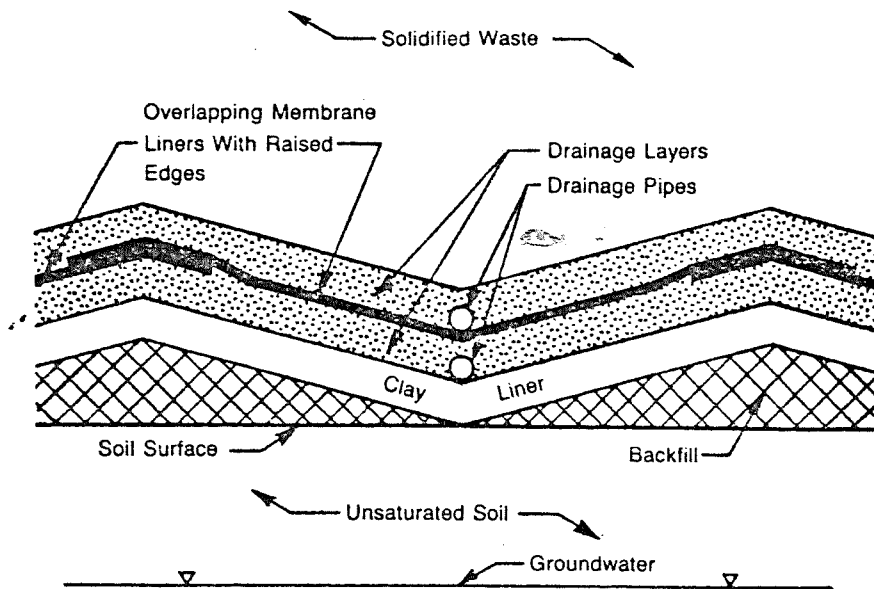


Figure 2. Leachate collection system of an above-ground landfill would include both a drainage layer and collection pipes, either of which could function independently if the other failed.

brane liners were constructed on a sloped, sawtoothed base. Because leachate would be continuously removed by gravity, the liquid level should never reach the overlapped membrane edges. By the time the membrane deteriorated, the concentration of salts, acids, bases and organics should have decreased substantially.

Clay minerals, with their proven ability to last thousands of years, may be a better liner material for minimizing the long-term leakage of weak leachates. With an overlying membrane, a clay liner is protected from the strong initial leachate that might otherwise increase liner permeability.

Both above and below-ground landfills may be equipped with low permeability caps. While caps reduce leachate generation resulting from infiltration of water, these caps may shear or crack due to settlement of the landfilled waste. Compared to leaking liners, cracked caps are easier to repair. However, cap deterioration may not be readily apparent through visual inspection once the landfill is covered with topsoil and permanent vegetation. Cap failure may only be detected through increase in leachate production. Such an increase in leachate volume may go unnoticed in a below-ground facility until groundwater is polluted. However, it would be readily evident as an increased leachate discharge rate in an above-ground landfill.

Since above-ground facilities are further from groundwater, siting requirements may, in some cases, be less severe than those for below-ground facilities. Also, gases generated above the normal ground surface are less likely to cause subsurface migration to adjacent areas. Still other options that could be incorporated into above-ground landfills include the following:

1. Above the leachate collection system, layers of materials such as crushed limestone and activated charcoal could be placed to remove heavy metals and organics, respectively.
2. Before placement of the low permeability cap, leachate could be recirculated through the landfill cells to both hasten digestion of readily degradable organics and leach the highly mobile waste constituents prior to the post-closure period.

There are a variety of other advantages to keeping waste

above ground. For instance, no one would ever forget the location of the disposal site. In addition, if the waste becomes valuable someday, it could easily be mined. The uncapped landfill surface could also be used as an intensive land treatment unit.

Disadvantages of above-ground landfills include the potential for poor site aesthetics and the need for erosion control. However, with proper design and use of vegetation, both problems can be overcome. Site aesthetics of above-ground facilities may be improved by maintaining a permanent vegetative cover over the facility. Additional improvements in site aesthetics could be obtained by planting trees and small woody species around the periphery and along adjacent roadways. Erosion can be minimized by a permanent vegetative cover and a site design that minimizes steepness and total area of side slopes. Using adjacent landfill cells can decrease the total area of slopes, while a small amount of earth fill can sufficiently reduce the steepness of exposed sidewalls.

Improving landfills

Landfill design has come a long way in the past two decades, but there is still need for improvement. Lack of enthusiastic public acceptance and the threat of long-term liabilities due to groundwater contamination from below-ground landfills are two of the indications that further changes are warranted. Current hazardous waste regulations limit the landfilling of liquids. The next step should be to reduce the landfilling of organic chemicals by encouraging the use of land treatment (for readily degradable organics) and incineration (for nondegradable organics such as PCBs). The remaining inorganic wastes and incinerator residues could be solidified and safely disposed in above-ground landfills. Well designed above-ground facilities have the potential to both improve the acceptability and greatly decrease the pollution risks of landfills.

PE

Kirk Brown and David Anderson are with KW Brown & Associates Inc., an environmental consulting firm specializing in soil related aspects of waste disposal, College Station, TX.

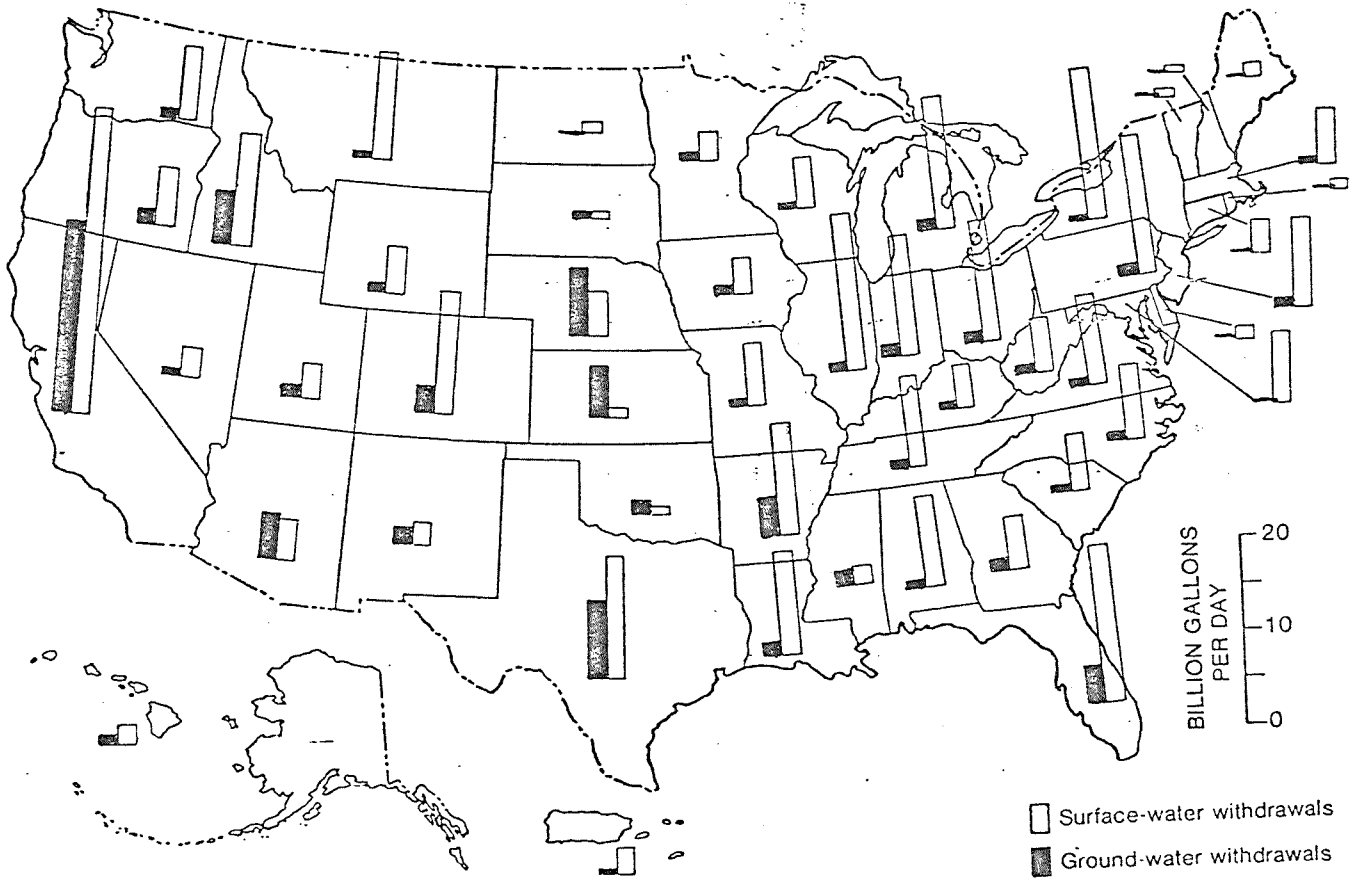


FIGURE 12. Withdrawals from ground water and surface water, by State, 1980. (From Solley and others, 1983.)

Atch. 7

testimony

I AM MAXINE HANSEN, SPEAKING ON BEHALF OF THE WICHITA-SEDGWICK COUNTY REGIONAL PLANNING COMMISSION IN SUPPORT OF H.B. 3095.

ONE OF THE PRIME RESPONSIBILITIES OF A PLANNING COMMISSION IS THE PREPARATION OF A COMPREHENSIVE LAND USE PLAN, A MAJOR COMPONENT OF WHICH INCLUDES RECOMMENDATIONS FOR THE SITING OF MAJOR PUBLIC FACILITIES.

AND THERE IS PROBABLY NO MORE POLITICALLY AND ENVIRONMENTALLY SENSITIVE SITING THAN THE PLACING OF A LANDFILL IN A COMMUNITY.

THE NEED FOR ADEQUATE LANDFILLS AROUND A MAJOR METROPOLITAN AREA IS SELF-EVIDENT, BUT IT IS INDEED A NON-PRODUCTIVE USE OF VALUABLE LAND AND ALWAYS CARRIES THE POTENTIAL HAZARD OF GROUNDWATER CONTAMINATION.

WITH ONLY ONE LANDFILL OPERATING IN NORTHWEST WICHITA, THERE IS A PRESSING NEED IN OUR COUNTY FOR MORE STRATEGICALLY LOCATED DUMPING SITES.

WHICH IS WHY WE ENTHUSIASTICALLY ENDORSE THE RESOURCE RECOVERY PROGRAM AS PRESENTED BY THE SEDGWICK COUNTY DEPARTMENT OF ENVIRONMENTAL RESOURCES AND ALL EFFORTS TO IMPLEMENT IT. ALL ASPECTS OF THIS ALTERNATIVE METHOD OF TRASH DISPOSAL SPEAK TO A KANSAS MINDSET OF USING OUR RESOURCES FULLY IN AN ECONOMICALLY AND ENVIRONMENTALLY SOUND WAY.

WE BELIEVE HB 3095 CLARIFIES THE AUTHORITY OF CITIES AND COUNTIES TO PROCEED WITH IMPLEMENTATION, AND WILL REDUCE THE LIKELIHOOD OF COSTLY LEGAL DELAYS AS THE PROGRAM MOVES FORWARD.

THE WICHITA-SEDGWICK COUNTY METROPOLITAN PLANNING COMMISSION SUPPORTS AND ENDORSES HB 3095.

Atch. 8

SUBJECT: Support of HB 3095

PRESENTED TO: Senate Energy and Natural Resources Committee

PRESENTED BY: City of Emporia, Kansas
Richard Cotton, Assistant to the City Manager

DATE: March 27, 1984

Chairman Angell and Committee Members:

My name is Richard Cotton and I represent the City of Emporia, Kansas. We welcome the opportunity to discuss our support of House Bill 3095.

In about three years, the Emporia/Lyon County Sanitary Landfill will need to be replaced by a new solid waste disposal site. The City of Emporia has investigated the feasibility of incineration with energy recovery as an alternative to the acquisition and subsequent development of a new city/county landfill. Our studies show that this technology is proven and is operating successfully in a number of industrial and municipal operations.

The facility under consideration in Emporia would dispose of the refuse for Emporia and surrounding Lyon County and produce approximately 25,000 pounds per hour of steam for industrial use. Such a facility can dispose of refuse in an environmentally acceptable manner and may also offer an economical alternate energy source.

To make it economically feasible to operate a resource recovery facility, it is necessary to have a sufficient amount of refuse to produce energy and a buyer of the energy produced. In Lyon County, we presently dispose of approximately 100 tons of refuse daily. At this rate, a resource recovery operation may be undertaken that will allow an adequate return on capital investment. It is our opinion that the passage of HB 3095 will allow the City of Emporia to guarantee our steam buyer with a steady supply of energy.

The City of Emporia urges the Senate Energy and Natural Resources Committee recommend passage of HB 3095.

My name is Ward Clements. I am the City Manager of Derby, Kansas. Derby is a city of over 10,000 people in the southeast portion of Sedgwick County, Kansas.

There has been, for the past several years, a small private landfill in operation near the south city limits of Derby. This was a convenient landfill facility for the citizens of Derby and Mulvane and the private solid waste carriers serving both cities and the surrounding area.

It has come to our attention that the State officials have asked the operators of this private landfill to begin covering operations and to close by June 30, 1984.

The City of Derby has been kept informed by, and has cooperated with, Sedgwick County Environmental Resources Department and the Resource Recovery Feasibility Study published in 1982.

When the Chapin Landfill was closed, Sedgwick County studied additional sites for a sanitary landfill in the southern part of the county. In the case of each site the residents had many valid reasons why a landfill should not be located in their area. The existing Brooks Landfill is located in the northwest quarter of the county and is a great distance from the southeast quarter of the county. It is 45 miles round trip from Derby to Brooks Landfill and is a large factor in the cost of residential pickup of solid waste in most of Sedgwick County. Even though Brooks Landfill has been extended, it, too, shall be filled in time with the waste being taken there from the entire county.

We have visited three of the facilities addressed in HB 3095. The sites were very clean and, from the outside, appeared to be a small warehouse. There was no objectionable odor any place around the facility. In addition, they have the capability of 95% reduction leaving only 5% to be buried, so the landfill would last much longer. Also, many of the objectionable things about landfills - like the blowing of paper - would be abated. The many advantages of these modular incinerators make the use of them in the best public interest.

For these reasons, we ask that you favorably report HB 3095 and urge its passage at this session.

ROBERTA KIMBLE
City Clerk
777-1143

CITY OF MULVANE

MERLE McKEE
Fire Chief
777-1111

GEORGE LARSEN
Director of Emergency Services
777-1551

211 North Second
Mulvane, Kansas 67110
Emergency Number 777-1111

GARY RAMBO
Utility Superintendent
777-4491

WILLIAM SIMMONS
Police Chief
777-1111

EDWARD W. ELAM, City Administrator 777-1144

TERRY McCLURE
Street Superintendent
777-1242

To the Chairman and Committee members of the Senate Committee on Energy and Natural Resources

I have asked Dr. Hahn to submit to you a written statement of complete support for the Solid Waste Disposal Legislation, House bill 3095, which you are hearing today. I regret that I am unable to appear before you because of a conflict in schedules.

My name is Edward W. Elam, City Administrator of the City of Mulvane, Kansas since 1980. During the last several years I have had the pleasure of attending several meetings within our area of local elected officials, staff personell, and Dr. Hahn and his staff to discuss the severe problem of disposing of solid waste generated by our communities. The most feasible solution being investigated during this time is the waste to energy facilities that is discussed in this proposed bill. Several of our community leaders have made personel visits to operating facilities in the surrounding states. I have had the opportunity to personally visit two operational plants in a little over a year ago and was very impressed by the cleanilness and lack of abusive smell or sound that would have been expected before visiting these plants. Both of the plants used solid waste to generate steam that was sold for commercial use by privately owned operations nearby. This type of operation helped eliminate capital expenditures for providing a landfill area and the operation of that type of disposal facility. All of the existing facilities visited had a clean and pleasant atmosphere with no great affect on the surrounding property. In most cases the neighborhood is totally unaware of what type of facility is being operated in their back yards.

The solid waste problem is a very real and controversial problem that does exist not only in our communities but throughout the state of Kansas. The concept of utilizing existing of new landfills seems to fall short of an efficient and well managed process of disposing of this waste. The method of providing solid waste to energy facilities and using the by-product of steam in a commercial application would seem the most efficient way to solve this every increasing problem.

This legislation is needed by the citizens of Kansas and I and the governing body of Mulvane am in total support of this proposal.

Thanking you in advance for your time for reviewing my testimony in the above statement and we hope that your committee will unanimously pass this onto to the Senate for final approval.

Respectively submitted,



Edward W. Elam
City Administrator



Atch. 11

March 26, 1984

To the Chairman of the Senate Committee on Energy and Natural Resources and
Committee Members.

My name is Gerald W. Powell and I represent the City of Mulvane. In addition to serving on the Mulvane City Council, I am an active member and representative of the Sedgwick County A.L.A.R.M. organization, the Sumner County Economic Development Board of Directors and a very concerned citizen of the State of Kansas.

I regret that due to conflicting schedules I am unable to appear before you today in person, but let me assure you that I am totally supportive of the Solid Waste Disposal legislation, HB 3095, that was recently passed by the Kansas House of Representatives.

The proper disposal of solid waste is a very real and controversial problem that affects each and every citizen of the State of Kansas. The concept of utilizing land-fills for the disposal of solid waste falls drastically short of being an exceptable solution. The method of disposal as provided for in HB3095 and presented by Dr. Hahn is both a suitable and a feasible solution to this very real problem.

I have personally studied this problem and I have visited a modular facility and I can personally attest to the facts as presented by Dr. Hahn. This legislation is drastically needed by the citizens of Kansas and is totally supported by me and the organizations I represent. Thank you for allowing me to testify on this critical issue.

Respectfully Submitted,

Gerald W. Powell
Gerald W. Powell

Atch. 12



The City of Haysville

"THE PEACH CAPITAL OF KANSAS"

P.O. Box 404
Haysville, Kansas 67060

Senator Charlie L. Angell
38th District, Kansas Senate
State Capitol Building
Topeka, Kansas 66606

Dear Senator Angell:

On behalf of the City of Haysville, Kansas and the Rural Mayor's Association of Sedgwick County (A.L.A.R.M.), I would like to speak to you as chairman of the Senate Energy and Natural Resources Committee in favor of HB 3095.

Sedgwick County cities, both rural and urban, have been actively seeking alternatives for solid waste disposal in our area. Today, the county is dangerously near the closure of our existing landfills and some alternative to another environmentally damaging landfill site is being considered. After a visit to two trash incineration plants in Arkansas a few years ago, we are convinced that there are workable alternatives to landfills that can not only take care of the refuse disposal problem, but generate energy for industry and power plants that can help our state become more energy independent.

For these reasons and the fact that Sedgwick County has already made a major committment to this effort with the completion of the Sedgwick County Resource Feasibility Study of 1982, we feel you and your committee should actively support HB 3095 and allow cities and counties to band together to help industry and the general public become more energy independent and environmentally safe.

Sincerely yours,

Charles F. Vogt
City Administrator

Secretary/Treasurer
Association for Legislative Action for Rural Mayors

cc: Chairman Glenn Crum, Haysville
Chairman Walter Newton, Kechi
Sedgwick County Delegation
file

Atch. 13

GOOD MORNING CHAIRMAN ANGELL, MEMBERS OF THE COMMITTEE, I AM M.S. "MITCH" MITCHELL OF WICHITA, APPEARING TODAY AS A MEMBER OF THE TECHNOLOGY COMMITTEE OF THE RESOURCE RECOVERY TASK FORCE WHICH DR. HAHN DESCRIBED. BEFORE SERVING ON THE TASK FORCE, I WAS, FOR MANY YEARS, A CITY-COUNTY PUBLIC WORKS EMPLOYEE AND WAS INVOLVED IN SELECTION OF THE SITE FOR THE BROOKS LANDFILL IN NORTHWESTERN WICHITA. LATER, I SERVED ON THE CITY-COUNTY ENVIRONMENTAL RESOURCES ADVISORY BOARD DURING THE SEARCH FOR A SITE TO REPLACE THE CHAPIN LANDFILL IN SOUTH WICHITA.

BASED ON MY EXPERIENCE WITH LANDFILLS IN THE WICHITA-SEDGWICK COUNTY AREA AND ON THE DEVISIVE PUBLIC ATTITUDE TOWARD THE LOCATION OF A NEW LANDFILL SITE, IT IS MY OPINION THAT, WITHOUT A PROGRAM TO CONVERT REFUSE TO ENERGY AND TO REDUCE THE VOLUME AND NATURE OF THE SOLID WASTE TO BE BURIED, NO CITY OR COUNTY ELECTED BODY CAN ACQUIRE AND OPEN ANOTHER LANDFILL IN SEDGWICK COUNTY.

AS A MEMBER OF THAT TECHNOLOGY COMMITTEE I INSPECTED MOST OF THE REFUSE TO ENERGY PLANTS TO WHICH DR. HAHN REFERRED, AND I AM HERE NOW TO TELL YOU THAT THE TECHNOLOGY EXISTS TODAY TO CHANGE THE PUBLICS ATTITUDE TOWARD SOLID WASTE FROM THE PERCEPTION THAT IT IS A LIABILITY TO THE KNOWLEDGE THAT IT IS AN ASSET. PRODUCTION OF STEAM FROM MUNICIPAL SOLID WASTE IS AS FEASIBLE TODAY AS IS THE PRODUCTION OF STEAM FROM COAL, AND IS USING THE PROCESS AND EQUIPMENT RECOMMENDED IN DR. HAHN'S REPORT, A LOT CLEANER. CONVERTING THE ENERGY IN STEAM TO ELECTRICAL POWER ADDS TO THE COST OF THE PLANT AND THE END PRODUCT, BUT IT IS STILL AS FEASIBLE AND POLLUTION FREE.

WHEN DR. HAHN MADE HIS PRESENTATION TO THE HOUSE COMMITTEE ON ~~COMMERCE~~, ^{Communications.}

^{Computers} AND TECHNOLOGY HE WAS QUESTIONED BY AT LEAST ONE COMMITTEE MEMBER WHO WAS, TO SAY THE LEAST, SKEPTICAL THAT BURNING TIRES OR RUBBER PRODUCTS IN A MODULAR INCINERATOR DOES NOT PRODUCE STINKING

STACK GASES AND SOOT. WHEN I VISITED THE NORTH LITTLE ROCK PLANT IN 1981 AND WAS TOLD THAT THE AIR POLLUTION MONITORING EQUIPMENT MOUNTED ON THE STACK OF THAT INCINERATOR WASN'T NEEDED, I TOO WAS SKEPTICAL. LATER THAT DAY WE INSPECTED THE BATESVILLE, ARKANSAS MODULAR INCINERATOR WHOSE EQUIPMENT IS THE SAME AS AT NORTH LITTLE ROCK, EXCEPT FOR IMPROVEMENTS NORMALLY SEEN IN SECOND AND THIRD GENERATION MODELS. THERE, BECAUSE THE PLANT HAD NOT YET BEEN PLACED IN SERVICE, WE COULD WALK INTO THE COMBUSTION CHAMBER AND I WAS AMAZED TO LOOK UP THROUGH THE STACK AND SEE NOTHING BUT BLUE SPRING SKY, NO TRAPS, PRECIPITATORS, BAGS, ETC.---JUST CLEAR BLUE SKY. DURING MY VISIT TO THE MIAMI OKLAHOMA PLANT I WAS ESPECIALLY CAREFUL TO OBSERVE THE STACK EMISSION BECAUSE OF THE LARGE AMOUNT OF RUBBER WASTE BEING BURNED ALONG WITH THE MUNICIPAL REFUSE. I WATCHED THE TOP OF THE EXHAUST STACK FOR SIGNS OF SMOKE OR SOOT, AND CHECKED THE AREA AROUND THE OUTSIDE OF THE BUILDING FOR EVIDENCE OF FALLOUT. NEITHER THE STACK NOR THE YARD AREA SHOWED SIGNS OF SOOT AND THERE WAS NONE OF THE STENCH NORMALLY ASSOCIATED WITH BURNING RUBBER.

I HAVE ALSO CAREFULLY INSPECTED THE RESIDUE FROM BOTH THE LITTLE ROCK AND MIAMI PLANTS AND I AM CONVINCED THAT IF, IN THE WORST CASE, IT HAS TO BE LANDFILLED, THAT MOST OF THE PUBLIC OBJECTIONS TO THE APPEARANCE AND NUISANCE ASSOCIATED WITH LANDFILLS CAN BE OVERCOME BY SUBSTITUTING THE INCINERATOR RESIDUE FOR MUNICIPAL TRASH.

FOR THESE REASONS, AS WELL AS THE BENEFITS TO THE ENERGY BALANCE, I URGE YOU TO PASS HB 3095 OUT OF COMMITTEE AND TO ACTIVELY SUPPORT IT ON THE SENATE FLOOR. THANK YOU.



TESTIMONY BY

**CHARLES M. BENJAMIN, Ph.D.
Member, Board of Harvey County Commissioners**

in support of H.B. 3095

before the Senate Committee on Energy & Natural Resources

Kansas Senate

**Tuesday, March 27, 1984
8:00 a.m.**

**State Capitol, Room 123-S
Topeka, Kansas**

INTRODUCTION

Thank you for the opportunity to testify on behalf of H.B. 3095 which would enhance the ability of cities and counties in Kansas to operate resource recovery facilities. I speak to you today as a member of the Board of Harvey County Commissioners who has to face the difficult problem of setting policies and guidelines for operating a sanitary landfill that serves all of the 30,000+ people in Harvey County. How to operate the landfill in a cost effective and yet environmentally sound and unobtrusive manner has been one of the most difficult problems that I have had to deal with since becoming a County Commissioner in 1981. I want to briefly outline what some of those problems have been in Harvey County and why I think H.B. 3095 will go a long ways toward helping us resolve those problems.

THE PROBLEMS OF SOLID WASTE MANAGEMENT IN HARVEY COUNTY, KANSAS

In 1973, the Board of County Commissioners authorized the development of a Solid Waste Management Plan for the County. The Bucher and Willis Company of Wichita, Kansas was hired as the consulting engineers for the project. The resultant plan, published in July 1973, included an analysis of basic background data, the projection of solid waste generation, a description of existing collection and disposal systems, the identification of problems within the system, recommendations for the optimum solid waste management system for the area, and estimates of operational costs. The master plan that was developed was designed to deal with the County's solid wastes to the year 1990.

In 1974, a new sanitary landfill was opened southwest of Newton on two adjacent 40 acre sites. The south 40 acre site was to be used first as Phase I

of the master plan. The life of that 40 acre site was estimated to be approximately 16 to 18 years assuming a compaction height of 18 feet. At the time of the opening of the south 40 acre site, some estimates were that the site would last as long as 25 years. Our most current estimate of the life of this site, however, is 12 to 13 years given the management and use of the site since its opening. This means that the south 40 acre site would be filled in approximately 3 years.

Because of complaints by residents of the county living near and downwind from the landfill, the Board of County Commissioners, in the summer of 1983, banned burning at the landfill. I have been aware of these complaints since I became a County Commissioner in 1981. However, due to an accidental fire last summer at the landfill which burned some 10,000 tires, the complaints became impossible to ignore. However, as a result of the burning ban the south 40 acre landfill site is filling up 2 to 3 times faster than normal. This means the closing of the south 40 acre site in 1-1/2 to 2 years. We have thus far not been able to come up with an alternative burning site that would not present major problems of road access, the need for additional personnel or environmental constraints.

Turning to the north 40 acre site presents us with other problems. There is a major natural gas pipeline running diagonally across the site. Because of requirements to maintain a certain distance from the pipeline, the land available for use in the north 40 acre site is probably 25% less than the south 40 acre site. All of these factors have produced a situation in which the Board of County Commissioners will be faced with identifying and acquiring another landfill site within the next five years. While the Board of County Commissioners have made it a top priority to operate the landfill more effectively and get as much use out of it as possible, there is no question that the governing body

will be faced with major policy decisions on these matters much sooner than anticipated ten years ago.

Another area of great concern to me are the many unknown effects of the materials being buried at the landfill. We have already had one incident of leachate pollution of a stream near the landfill site which is used to water livestock downstream. In the last two years alone, permission has been granted by the Kansas Department of Health and Environment to bury 130 cubic yards of asbestos ceiling materials removed from local schools because it was deemed a health hazard; 2,000 gallons of "sludge" from the cleaning of diesel storage tanks operated by a railway company; seven 53-gallon drums of asphalt based chassis paint from a local manufacturing company; paint silts and paint dust from another local manufacturing company; "grit" from a city sewage treatment plant; and 350 cubic yard of "dried sludge and waste materials" from a local rail yard. While all of these materials must be in some kind of container and their location at the landfill site logged, there are many unanswered and perhaps unanswerable questions about the long term viability of burying these materials. How long will the containers last? What happens if the containers rupture? Will the taxpayers of the county be forced to pay the cost of unearthing and re-containing these materials at some future time?

In addition to the kinds of materials mentioned above, there are many products that contain "hazardous materials" in small quantities that come to the landfill as part of the daily municipal solid waste. While individually these products may be relatively harmless buried in a landfill, we do not know the cumulative effects of burying 125,000 cubic yards of municipal and other wastes containing these individual materials per year over the course of 25 years and beyond.

WASTE TO ENERGY - A POSSIBLE SOLUTION

I was first introduced to the concept of waste to energy systems by listening to a presentation by Dr. Doug Hahn at a South Central Kansas Economic Development meeting in Wichita in 1982. I have been enthusiastic about its potential as a solution to our solid waste problems in Harvey County ever since that time. The idea of being able to burn 90% of municipal wastes in an environmentally safe and cost effective manner is obviously attractive to local elected officials faced with the kinds of problems that I have outlined. If these systems can be used to generate steam for manufacturing or other purposes and co-generate small amounts of electricity, then so much the better.

Last Thursday a large audience at a Chamber of Commerce legislative luncheon in Hesston heard Kansas House Speaker, Mike Hayden, speak with enthusiasm about these incinerator systems and in support of H.B. 3095 which would help make it a reality for local governments in Kansas. I hope that the members of this committee and the State Legislature as a whole shares Mr. Hayden's enthusiasm. I applaud you for seriously considering this innovative piece of legislation.

Thank you for the opportunity to testify before you today.

CMB/er

TOM SCOTT . . . COUNTY COMMISSIONER, 2nd DISTRICT

525 North Main Street

Phone (316) 268-7411

Wichita, Kansas 67203



March 22, 1984

TO: Senator Charles Angell, Chairman
Committee on Energy & Natural Resources
Kansas Senate, Topeka, Kansas

FROM: Commissioner Tom Scott, 2nd District
Sedgwick County, Kansas

Dear Senator Angell and Committee members,

Sedgwick County, Kansas, has suffered chronic solid waste disposal problems for many many years. As a Sedgwick County Commissioner I have long supported publicly alternatives for trash disposal in the county other than land fills. In particular I have long supported the use of technologies such as waste-to-energy systems for the environmentally safe disposal of trash. Such systems also allow for the recovery of useful materials such as energy from what would otherwise be buried in the ground.

Sedgwick County staff along with a citizens task force appointed by the Sedgwick County Commission conducted a comprehensive study of solid waste disposal in Sedgwick County and concluded that waste-to-energy systems were a viable local alternative. The study further recommended that such systems be implemented privately and utilize economic incentives to make such systems work. As a result of the study and as a result of detailed financial analysis, the Board of Sedgwick County Commissioners and the Board of Wichita City Commissioners jointly and unanimously approved a local waste-to-energy program during July 1983. I, of course, supported that action.

House Bill #3095, the legislation before you, provides the tools to successfully implement waste-to-energy programs in Sedgwick County as well as other communities and counties throughout the state of Kansas. Furthermore, the bill allows local governments and the local people to choose the system which best suits them, subject to review by the Kansas Department of Health and Environment. The bill also provides sufficient waste control mechanisms to assure private financial support for trash incineration facilities.

Atch. 16

Therefore, I offer my support for House Bill #3095.
The bill provides for an environmentally safe manner for trash disposal, reduces reliance on unpopular landfills and provides a positive and constructive use for waste material.

Your attention to my remarks is most appreciated.

Sincerely,



Tom Scott, Commissioner
2nd District

BOARD OF COUNTY COMMISSIONERS
Sedgwick County, Kansas

SEDGWICK COUNTY, KANSAS

BOARD OF COUNTY COMMISSIONERS



JACK SPRATT
CHAIRMAN
COMMISSIONER THIRD DISTRICT

DONALD E. GRAGG
CHAIRMAN PRO-TEM
COMMISSIONER FIRST DISTRICT

TOM SCOTT
COMMISSIONER
SECOND DISTRICT

COUNTY COURTHOUSE • SUITE 320 • WICHITA, KANSAS 67203-3759 • TELEPHONE (316) 268-7411

March 23, 1984

TO: Senator Charles Angell, Chairman
Committee on Energy & Natural Resources
Kansas Senate, Topeka, Kansas

FROM: Commissioner Jack Spratt, Chairman
Sedgwick County Board of County Commissioners

I have for many years publicly supported the use of technology which would provide an environmentally safe manner to dispose of trash. I enthusiastically support waste-to-energy systems as not only a means to dispose of trash but also a practical method of recovering useful materials and energy from otherwise useless trash.

A comprehensive study of solid waste disposal in Sedgwick County resulted in the conclusion that waste-to-energy systems were a practical and an advanced method of local solid waste disposal. I have had the opportunity to personally visit several waste-to-energy disposal systems in states surrounding Kansas. As a result of these studies and my personal observations, I have formed a strong opinion that waste-to-energy disposal is not only the most environmentally clean but the most economical method of solid waste disposal. In the case of Sedgwick County, I agree with the studies which recommend that these systems be implemented by the private sector and that they utilize economic incentives to make these systems work.

In July, 1983, after the results of the waste-to-energy studies and the detailed financial reports were presented, both the Board of Sedgwick County Commissioners and the Board of Wichita City Commissioners, jointly and unanimously approved a local waste-to-energy program.

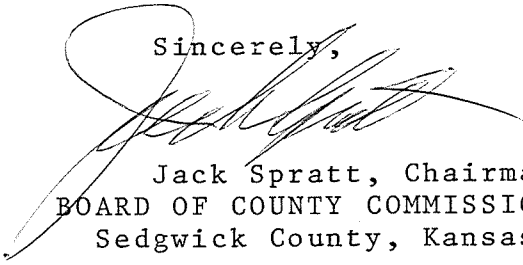
Atch. 17

House Bill #3095, provides the opportunity and the "know-how" for successful waste-to-energy programs in not only Sedgwick County but in other communities and counties throughout the entire state. Two important parts of this bill are; local governments and local people are allowed to choose the system which best fits their needs, subject to review by the Kansas Department of Health and Environment; and the bill provides adequate waste control methods to assure private financial support for trash incineration systems.

Sedgwick County has been plagued by chronic solid waste disposal problems for many years. I do not believe land fills are a solution to these problems. They have used and work only as a stop-gap measure until a better solution can be found. I believe House Bill #3095 offers this solution by providing an environmentally safe, economically sound and practical method of disposal for solid waste.

Thank you for your attention and I urge your support for this bill.

Sincerely,



Jack Spratt, Chairman
BOARD OF COUNTY COMMISSIONERS
Sedgwick County, Kansas

JS/dlh



Attachment 18

SOUTH CENTRAL KANSAS ECONOMIC DEVELOPMENT DISTRICT

Sutton Place, Suite 102 209 E. William, Wichita, Kansas 67202 (316) 262-5246

March 26, 1984

Mr. Charles Angell, Chairman
Energy & Natural Resources Committee
Kansas State Senate
State Capitol
Topeka, KS 66612

Re: Public Hearing on House Bill No. 3095
An Act Relating to Solid Waste; Concerning
Resource Recovery Facilities.

Dear Senator Angell:

The State of Kansas is to be commended for its efforts to clarify responsibilities, limitations and procedures regarding installation of resource recovery facilities in Kansas addressed in the referenced legislation. As these facilities are determined to be cost effective by both the public and private sectors in Kansas communities, enactment of this legislation should remove much of the uncertainty associated with decisions to commit significant capital investment associated with these projects.

Our organization is comprised of 14 counties and 130 communities, which total 15% of the land area and 28% of the population of the State. We view resource recovery facilities as an option for serious consideration in creating an alternate energy source for base load energy users in our District, and also relieving area politicians of the unpleasant task of identifying new sites for future solid waste sites.

For these reasons, the Executive Committee took action at its March 22, 1984 meeting to endorse House Bill No. 3095 as written.

Sincerely,

Bill Hacker
SCKEDD President

JEA/BH/rcw

Atch. 18



OFFICE OF THE MAYOR
CITY HALL — FIRST FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202
(316) 268-4331

March 22, 1984

Senator Charles Angel
Chairman, Committee on
Energy and Natural Resources
Kansas Senate
Topeka, Kansas 66612

Dear Senator Angel:

The disposal of solid waste has been a chronic and serious problem in Wichita and the surrounding area for several years. It has been exacerbated by the political difficulty associated with siting new landfills and the intuitive feeling that the burial of trash represents the loss of valuable materials as well as the potential for groundwater contamination.

The Wichita City Commission and the Sedgwick County Commission jointly sponsored a study of alternatives for the disposal of trash in the area. The major recommendation of that study was the installation of a network of modular waste-to-energy incineration facilities capable of converting area trash into energy for sale to market customers. A secondary recommendation of the study was that the facilities be privately owned and operated. The total capacity of the system recommended for Sedgwick County was a series of facilities capable of processing 900 tons of trash per day. Detailed financial analyses of individual facilities by local government staff and local financial experts indicated that a waste-to-energy program was indeed viable for the private sector.

As a result of the study and its recommendations, and after careful consideration, the City and County Commissioners jointly and unanimously endorsed implementation of a waste-to-energy program in Wichita and the remainder of Sedgwick County in July 1983. Since that time, local government staff has been working with private parties to develop proposals for specific facilities as well as developing procedures for implementation of a waste-to-energy system.

The City of Wichita supports House Bill No. 3095 related to resource recovery facilities. Specifically, enactment of this bill would provide the necessary tools for implementation of the selected waste-to-energy program for the City of Wichita and would provide a vehicle for other communities in the state to embark on similar programs. The legislation provides clear authority for a city or a county or a combination of cities or counties to provide for resource recovery facilities operated either publicly and/or

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THE CITY OF WICHITA

Senator Charles Angel
March 22, 1984
Page 2

privately. The bill protects recycling activity as had been proposed in the local solid waste study. It also provides a vehicle for standby local waste flow control, an important consideration to financial investors and operators of waste-to-energy facilities. Finally, the act clearly delegates control of local solid waste by the cities or counties, subject to specific oversight by the state.

All of these issues are important to the implementation of a successful solid waste incineration program. The City of Wichita is excited about the potential that this bill offers because the legislation provides local governments the opportunity to turn a chronic problem, namely trash disposal, into a positive, construction solution. Furthermore, a reduction in reliance on sanitary landfills for solidwaste disposal reduces the potential hazard of groundwater contamination and the aesthetic problems associated with improperly operated landfills. In conclusion, the City of Wichita supports and endorses the proposed legislation regarding resource recovery.

Sincerely,



Margalee Wright
Mayor

MW:jh

THE CITY OF  WINFIELD

ADMINISTRATION
Phone 316-221-2183
200 E. Ninth — P.O. Box 646
Winfield, Kansas 67156

OFFICE OF: Mayor

March 23, 1984

Honorable Charlie L. Angell, Chairman
Energy and Natural Resources Committee
Kansas Senate
State Capitol Building
Topeka, KS 66612

RE: House Bill 3095


Dear Senator Angell:

As Mayor of the City of Winfield, Kansas, I wish to indicate my support for House Bill No. 3095 concerning resource recovery facilities to be heard by the Senate Energy and Natural Resources Committee on Tuesday, March 27, 1984.

The cities of Winfield and Arkansas City, Kansas, recently concluded a joint feasibility study for a solid waste incineration facility to produce steam energy. An element of the feasibility of this project was the ability of the cities to include privately-collected industrial solid wastes in the materials to be burned to attain economies of scale in facility capacity. Although the joint facility studied is not feasible under current economic conditions, it may become feasible in the not-too-distant future. In this eventuality, the provisions of House Bill No. 3095 to require the use of such a solid waste-to-energy facility for the disposal of privately-collected industrial wastes will be essential to the financial feasibility of the project.

For this reason, I urge favorable action on this legislation by the Senate Energy and Natural Resources Committee.

Very truly yours,


Robert E. Duncan
Mayor

cc: Members of the Senate Energy and Natural Resources Committee

Atch. 20

MINUTES OF THE MEETING OF THE BOARD OF COUNTY COMMISSIONERS OF JOHNSON COUNTY, KANSAS, HELD THURSDAY, FEBRUARY 16, 1984.

A regular meeting of the Board of County Commissioners of Johnson County, Kansas, was held on Thursday, February 16, 1984, with the following members being present and participating, to-wit:

Chairman Bruce R. Craig
Commissioner William E. Franklin
Commissioner Johnna Lingle
Commissioner Robert C. Bacon
Commissioner Janet D. Leick

Whereupon, there came on for discussion and consideration four (4) House Bills pending in the Kansas Legislature concerning hazardous wastes and nuclear energy development and radiation, as follows:

- (a). House Bill No. 2725 relating to the powers and duties of the Secretary of the Department of Health and Environment.
- (b). House Bill No. 2726 concerning establishing a waste clean-up fund.
- (c). House Bill No. 2740, basically a house cleaning bill, relating to hazardous wastes and amending the Solid and Hazardous Waste Act, Article 4, Chapter 65, K.S.A. 1983 Supp.
- (d). House Bill No. 2760 amending sections of the Nuclear Energy Development and Radiation Control Act.

The Board, being fully and well advised in the matter, upon a motion by Commissioner Bacon, seconded and carried, adopted the following Resolution, to-wit:

RESOLUTION

No. 023-84

NOW, THEREFORE, BE IT RESOLVED by the Board of County Commissioners of Johnson County, Kansas, that the Board endorses the

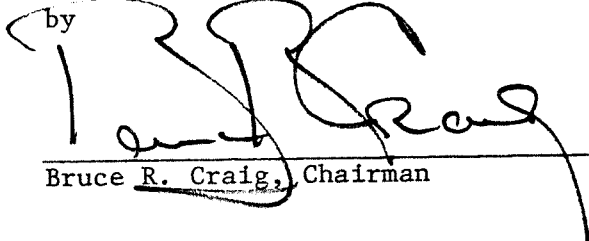
Atch. 21

(Resolution - 023-84-Continued)

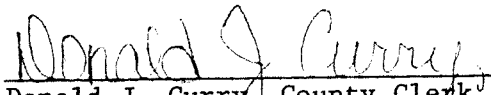
adoption by the Kansas Legislature of House Bills Nos. 2725, 2726, 2740 and 2760, and directs that a copy of this Resolution be forwarded to the Chairman of the House Committee on Energy and Natural Resources.

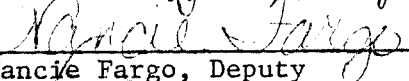
BOARD OF COUNTY COMMISSIONERS
JOHNSON COUNTY, KANSAS

by

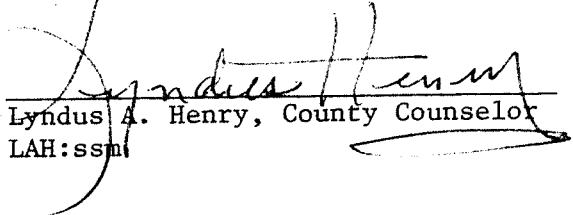

Bruce R. Craig, Chairman

ATTEST:


Donald J. Curry, County Clerk

By: 
Nancie Fargo, Deputy

APPROVED AS TO FORM:


Lyndus A. Henry, County Counselor
LAH:ssm

