

Approved March 3, 1988
Date

MINUTES OF THE HOUSE COMMITTEE ON ENERGY AND NATURAL RESOURCES

The meeting was called to order by Representative Dennis Spaniol at
Chairperson

3:30 ~~xxx~~ a.m./p.m. on February 23, 1988 in room 526-S of the Capitol.

All members were present except:

Representative Sifers (excused)

Committee staff present:

Raney Gilliland, Legislative Research
Laura Howard, Legislative Research
Arden Ensley, Revisor
Betty Ellison, Committee Secretary

Conferees appearing before the committee:

Representative LeRoy F. Fry
Nancy E. Ricker, Lyons, Kansas
Margaret Post Ahrens, Sierra Club
Charlene A. Stinard, Kansas Natural Resource Council
Darrel Montei, Legislative Liaison, Department of Wildlife and Parks
Edward A. Martinko, Director, Kansas Biological Survey
Dennis Murphy, Kansas Department of Health and Environment
Ron Hein, Vulcan Chemicals Company
Jim Boyd, Plant Manager, Vulcan Chemicals Company
Representative Jim Russell
Chris Logelin, Manager of Environmental Affairs, Aptus, Coffeyville
Paul J. Peters, PH.D., Site Manager, Fredonia Waste Management Facility
Bernie Koch, Wichita Area Chamber of Commerce
Willie Martin, Intergovernmental Coordinator, Sedgwick County
Representative Kent Campbell
Francis Cox, Executive Director, Kansas Water Well Association
Dr. Morgan Powell, Kansas State University,
Extension Water Quality Task Force
Glenn H. Moore, Miracle Water, Medicine Lodge
Lucius Cole, P.E., Technical Director, Water Quality Association,
Lisle, IL.
Paul E. Fleener, Director, Public Affairs Division,
Kansas Farm Bureau

House Bill 2929--Hazardous Waste Incinerators

Representative LeRoy Fry, primary sponsor of the bill, was the first proponent. He explained how this bill would amend existing hazardous waste regulatory statutes. Mr. Fry also referred to Oklahoma law and an opinion of the Attorney General relative to location of a hazardous waste incinerator. (Attachment 1)

Nancy Ricker addressed the committee as a proponent. She represented citizens of Rice and Barton counties who are concerned about the environment of Kansas and its future. In her summary, several amendments were recommended. (Attachment 2)

Margaret Ahrens, representing the Kansas Chapter of Sierra Club, presented testimony in support of House Bill 2929. She noted that Sierra Club took the position that such a project must be evaluated as a whole, considering both pros and cons. (Attachment 3)

Charlene Stinard represented the Kansas Natural Resource Council and Kansas Rural Center with testimony in support of the bill's attempt to regulate incineration as a method of disposal. Three recommendations were made for additional control. (Attachment 4)

CONTINUATION SHEET

MINUTES OF THE HOUSE COMMITTEE ON ENERGY AND NATURAL RESOURCES,

room 526-S, Statehouse, at 3:30 ~~xxx~~ p.m. on February 23, 1988

Darrel Montei spoke on behalf of the Department of Wildlife and Parks. He expressed concern regarding environmentally sensitive areas such as Cheyenne Bottoms, which is a critical habitat for whooping cranes. The State Nongame Conservation Act and subsequent regulations by Wildlife and Parks offer some protection for the area. Mr. Montei noted that Wildlife and Parks could discuss projects (such as incineration) with other agencies to develop compromises. He felt that his agency could support House Bill 2929 because of the additional protection offered to such areas as Cheyenne Bottoms.

Dr. Edward Martinko, speaking on behalf of the Kansas Biological Survey, expressed qualified support for House Bill 2929. It was his belief that an environmental impact review should be specified in the bill and/or the composition of the hazardous waste disposal facility approval board should be expanded to include Wildlife and Parks, the State Biologist and other appropriate entities. (Attachment 5)

Dennis Murphy, Bureau Manager, Bureau of Waste Management with the Department of Health and Environment, presented testimony in opposition to House Bill 2929 in its present form. He noted that a 1987 review of all state hazardous waste management programs rated the Kansas program as one of the ten best in the country. Four amendments were listed which would allow the Department to support this bill. Otherwise it was viewed as an impediment to the development of treatment capacity for sound management of hazardous waste and because of its potential to seriously disrupt the state regulatory program for hazardous waste management. (Attachment 6)

Ron Hein, representing Vulcan Chemicals Company, introduced Jim Boyd, Plant Manager of that company. Mr. Boyd testified in opposition to House Bill 2929, noting that in view of the recent Attorney General's opinion, the prohibition of building any hazardous waste facilities in Kansas would be constitutionally questionable and should be reviewed. His company supported the current Kansas environmental laws and viewed the modifications proposed as unnecessary. (Attachment 7)

Representative Jim Russell explained to the committee the increase in employment in Coffeyville since the establishment of the APTUS facility and incinerator there. (Attachment 8) He introduced Chris Logelin, Manager of Environmental Affairs, Aptus-Coffeyville, Kansas. Mr. Logelin testified in opposition to House Bill 2929, noting that RCRA and other regulations adequately safeguard the residents of Kansas. He believed that this bill was duplicative and could even hamper the State's ability to professionally regulate hazardous waste facilities. (Attachment 9)

Paul J. Peters, P.H.D., represented the Systech Corporation of Fredonia, Kansas. He told the committee that his company had been managing hazardous wastes by burning them as fuel in cement kilns in Fredonia since 1982. He felt that House Bill 2929 would be counterproductive and would discourage responsible waste management in Kansas. (Attachment 10)

Bernie Koch, speaking on behalf of the Wichita Chamber of Commerce, opposed House Bill 2929. He commented that many cities and counties are looking for alternatives to landfills and are primarily turning to modern incinerators. He was concerned that this bill might preclude incinerators in some way. He also felt that it might force business and industry to transport hazardous waste out of state, even though a safer and cheaper alternative could be possible locally. (Attachment 11)

CONTINUATION SHEET

MINUTES OF THE HOUSE COMMITTEE ON ENERGY AND NATURAL RESOURCES,
room 526-S, Statehouse, at 3:30 ~~xxx~~/p.m. on February 23, 19 88

Willie Martin represented the Board of Sedgwick County Commissioners as an opponent to the bill. Her written testimony contained specific and technical comments made by Dr. Hahn, Sedgwick County's Director of Environmental Resources. Also included was a copy of the Attorney General's Opinion No. 88-16. (Attachment 12)

Brief discussion followed.

House Bill 2944--Establishing the Kansas commission on private household water quality.

Representative Kent Campbell, primary sponsor, gave some background on how this bill came about. Mr. Campbell called attention to an error at the bottom of page 1 of his written testimony. The statement "Here in Kansas, officials estimate 3 in 10 farm wells contain unacceptably high levels of pesticides," that percent should represent the percentage of wells with unacceptably high levels of nitrates. A more accurate figure would be about 8 percent relative to pesticides. Mr. Campbell felt that the various efforts being made in Kansas to protect groundwater from contamination were somewhat fragmented and that House Bill 2944 would more closely coordinate the work being done on the problem. (Attachment 13) Committee discussion followed.

Francis Cox, Executive Director of the Kansas Water Well Association, presented testimony supporting House Bill 2944. He recommended including a representative of the water well and pump industry in the formation of the commission. (Attachment 14)

Dr. Morgan Powell, Co-Chair of KSU Extension Water Quality Task Force, gave favorable testimony relative to House Bill 2944. He outlined research being done on private farmstead wells by the Department of Health and Environment and Kansas State University Researchers. Dr. Powell also listed projects included in a water quality educational program currently being carried out by the Water Quality Task Force. (Attachment 15) Dr. Powell distributed the program from an Extension Service training session as an example of the work being done. (Attachment 16)

Glenn Moore, represented the Kansas Water Quality Association. He cited an example of a case in which he tested the water from a farm well near Argonia, Kansas. In this case, the water had been reported safe for drinking by the State Board of Health, but had only been tested for E-COLI, Bacteria and Nitrates and did not report other contaminants which were present. Mr. Moore said that this was not an uncommon occurrence in his area near Medicine Lodge and Pratt. (Attachment 17)

Lucius Cole, P.E., gave favorable testimony on behalf of both the Water Quality Association (WQA) and the Kansas Water Quality Association (KWQA). He supported a role for the commission to study the issue of what information should be included in water testing reports to private well owners, including both the types of contaminants tested and the information that the test was not designed to analyze for other contaminants. He recommended that a representative from a state certified laboratory designated by the director of the state's laboratory certification program be included in the commission, as well as a representative from a lending institution, since they often require a test of a private water supply before approving a loan. (Attachment 18)

CONTINUATION SHEET

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room 526-S, Statehouse, at 3:30 ~~xxx~~ p.m. on February 23, 1988

Paul Fleener, representing Kansas Farm Bureau, testified in favor of House Bill 2944. He noted that his organization had just approved an educational program which would begin with a "Self-Help" Checklist for possible contaminants and for pollution control measures which might be needed. Mr. Fleener suggested that the thrust of the proposal in House Bill 2944 be directed to the Kansas Water Authority and the Basin Advisory Committees to develop specific programs and to cooperate with other organizations in educational and informational efforts to protect water quality from contamination. (Attachment 19) A typical Self-Help Checklist was distributed. (Attachment 20)

Written testimony relative to House Bill 2929 was received from Donna Hinderliter of Wichita. (Attachment 21)

There were no objections to the minutes of February 18 and they were approved. The minutes of February 22 were distributed.

The hearing on House Bill 2944 was recessed at 5:07 p.m., to be resumed at 3:30 p.m. on February 24, 1988 in Room 526-S.

Date: Feb. 23, 1988

GUEST REGISTER

HOUSE

COMMITTEE ON ENERGY AND NATURAL RESOURCES

NAME	ORGANIZATION	ADDRESS	PHONE
Lucius Cole	Kansas Water Quality Association Water Quality Association	4151 Nashville Rd. Lisle, IN 46152	(312) 369-1600
Glen H Moore	Kansas water quality ass.	P.O. BOX 134 MEDICINE LODGE, KAN.	316-886-5748
Paul J Pitter	Systech Corp.	P.O. Box 29, Fredonia	316- 378-4451
Dennis Murphy	KDHE	Topeka	(913) 296-1592
Margaret Ahrens	Ks Chapter Service Club	Topeka	233-6707 273-7546
James Power	KDHE	Topeka	296-1535
Ed Martinko	Ks. Biological Survey	2291 IRVING HILL DR Lawrence, KANSAS 66045	913-864-7725
Ed Reinert	Ks League Women Voters		
Mary Ann Bradford	League of Women Voters Ks	Topeka	354-1646
Marie Eberhart		Raymond, K.	534-3367
Linda Meyers		Chase, Ks	316-938-2246
Kathy Reck	Concord River County Ctg.	Raymond, Ks	316-938-2545
Joanne Smelser		Topeka, Ks	267-3747
Tom Walsh	Aptus	RT 1 BOX 285F COFFEYVILLE, KS. 67337	(316) 251-6380
CHRIS LOGELIN	APTEUS	BOX 935 COFFEYVILLE, KS 67337	251-6380
Bill Hayter	Ks. Dept. of Wildlife & Parks	Box 599, RR 2 Pratt, Ks 67124	316-672-5911 Ext. 146
Danell Monte	KDWEP	Pratt	316-672-5911 Ext. 108
Francis Lot	Kansas Water Well Assn	RT 1, BOX 133A Clifton Kansas 66937	913-455-7676
MORGAN POWELL	KANSAS STATE U. EXTENSION	EXT. AGR. ENGR. 66506 SEATON HALL MANHATTAN, Ks 66513	913-532- 5813
Paul E. Fleener	Kansas Farm Bureau	2321 Anderson Ave Manhattan, Kansas	913-537 2261
Gary H. Holt	KDHE	Topeka	
Dave [unclear]	[unclear]	Topeka	296-3717

February 23, 1988

PRESENTED TO: ENERGY AND NATURAL RESOURCES COMMITTEE

BY: LeRoy F. Fry

RE: House Bill 2929 - AN ACT CONCERNING HAZARDOUS WASTE:
RELATING TO INCINERATION

House Bill 2929 would amend existing hazardous waste regulatory statutes by:

1. Line 70 - Adds a definition of incineration to mean "the detoxification of hazardous material by high temperature heat and flame."

Incineration has been used to destroy hazardous waste for several decades. The Environmental Protection Agency is continuing to study incineration in an effort to gather additional data on how best to incinerate hazardous waste and minimize the potential for harmful emissions. Research has pointed out the burning cycle, even in advanced incineration conceptions, leaves a percent of emissions of an unknown risk factor.

2. Line 236 - Requires that an application for a facility where hazardous waste is generated not be approved unless the applicant can show sufficient need from Kansas generators of hazardous waste.

There are positive alternatives to the waste problems. Industries are making an effort to recycle their own waste. Trading or selling waste to other related industries, neutralizing chemicals at the production site and incinerating at the source, would ensure knowledge of the exact chemicals being handled and lessen the demand of movement off site to other locations or states.

3. Lines 240-249. New Section 3.
 - a. requires written approval of property owners in a five-mile radius of the proposed site;

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PRESENTATION TO: ENERGY AND NATURAL RESOURCES COMMITTEE
House Bill 2929

Oklahoma law concerning incineration requires all affected property owners within one mile of the outer perimeter of the proposed site the opportunity to oppose the granting of such permit by requesting an informal public hearing.

- b. prohibits location of a hazardous waste incinerator within 25 miles of a site on the natural heritage inventory of the Biological Survey of the University of Kansas; and

Attorney General Opinion states:

It would appear that environmental concerns are important considerations in approving a facility application, legislation could require that a facility not be sited within a certain distance from an area listed on the natural heritage inventory. Certain emissions containing lead would effect the Cheyenne Bottoms and Quivira Refuge, both major central flyway migratory routes in our area of the state.

- c. requires that hazardous waste incineration facilities be approved by the hazardous waste disposal facility approval board. (Currently approval by this board is not required because incineration is considered treatment and not disposal.)

TO: Chairman Spaniol and Members of the House Energy and Natural Resources Committee

FROM: Nancy E. Ricker

RE: HB 2929 - Incineration of Hazardous Waste

Mr. Chairman and members of the committee, thank you for allowing time for testimony as a proponent of HB 2929. I am Nancy Ricker representing citizens of Rice and Barton counties who are concerned about the environment of Kansas and its future.

"State requirements may be more stringent than those imposed by federal law, as long as the state law is consistent with federal law." (Kansas Attorney General Opinion No. 88-16) Kansas needs more stringent regulations such as those proposed in HB 2929 because incineration of toxic materials is a technology whose long-term consequences for humans, plants, and animals cannot be proven safe. In a 1985 "Report on the Incineration of Liquid Hazardous Wastes by the Environmental Effects Transport and Fate Committee, Science Advisory Board", independent scientists conducting research for the Environmental Protection Agency (EPA) reached the following conclusions:

- (1) "-- fugitive emissions and accidental spills may release as much or more toxic material to the environment than the direct emissions from incomplete waste incineration." p.1.
- (2) "To date, only a very small portion of the compounds found in emissions from incinerators has been identified qualitatively or quantitatively." p.1.
- (3) "Research on the performance of incinerators has occurred only under optimal burn conditions---" p.2.
- (4) "---Agency (EPA) exposure assessments to biota and humans are unreliable." p.4.
- (5) "The toxicities of emissions and effluents from land based and ocean based incinerators are largely unknown." p.5.

Additional research indicates the incineration of carcinogenic heavy metals and the release of products of incomplete combustion during incineration pose significant health risk to humans. Kansas Wildlife and Parks and U.S. Fish and Wildlife officials have voiced similar concerns as they apply to endangered and threatened species. (See attached newspaper article.) Incineration of toxics deserves careful scrutiny. Lines 0070 and 0071 of HB 2929 would appear to give a benign definition of incineration. Baseline health and environmental impact studies financed by the applicant would appear necessities to provide checks on long-term incineration effects.

Section 2, (j) lines 0236 - 0239 addresses the issue of state's rights. Is it fair for Kansas, who produces relatively small quantities of toxic waste, to become the recipient of volumes of out-of-state waste? In Colorado, local governing boards are allowed disapproval of a certificate of designation, and may approve applications only if there has been a need demonstrated for the facility by in-state generators of hazardous waste. Kansas does not have this protection. With 3 active toxic waste incinerators currently operating in Kansas and with Coffeyville's seeking to expand its permit to include all types of hazardous waste, it would appear that Kansas has ample facilities to handle her own waste. Additional incine

Attachment 2

beyond what Kansas needs would most certainly encourage transportation of toxics into our state. Superfluous incinerators would also discourage industry from pursuing reduction of their own waste. There are alternatives to building more incinerators nationwide. In June of 1987, the U.S. Congress Office of Technology Assessment reported that industries nation-wide could eliminate, on the average, up to 50% of all hazardous waste and environmental pollutants. This source reduction could be accomplished in the near future, and would be cost effective. With each taking care of his own, we become more waste and environmental conscious. Waste exchange, neutralization, and recycling also become more attractive.

Lines 0240 - 0243 of HB 2929 are not inconsistent with popular vote pursuits in Nebraska regarding a nuclear waste facility, nor with the April 1987 Oklahoma law concerning toxic wastes. This Oklahoma law states that all real property owners within one mile of the outer perimeter of a proposed toxic waste site must approve in writing before that facility can be permitted. Such provision would also not be inconsistent, (in fact, would be conservative), as it relates to current Kansas regulations of hazardous waste sites such as those included in lines 0174 and 0178. These regulations stipulate a ten-mile radius for notification of governing bodies.

Another conservative measure exists in line 0243 - 0245. It is my understanding after talking with numerous authorities in the field of incineration, that depending on stack height, concentrations of emissions could be greater 25 miles from a stack rather than at its base. Add to this plume effect, the wind conditions in Kansas as well as the probability of accidental spills at the site or during transportation, concentrations of toxics could occur. Again, the Science Advisory Board reports: "Land based hazardous waste incinerators are stationary point sources which emit pollutants into the air, land, and water media. Emissions may occur as part of the incineration process, as part of the scrubber operations, or as fugitive emissions. Uptake of emissions by terrestrial life may occur through air, water, soil, or via the food web." (April 1985 report cited above.) There is a definite need to protect our threatened or endangered species. Therefore, I urge amending this bill to include any designated critical habitats of state-listed threatened and endangered species established by the Kansas Department of Wildlife and Parks as well as those listed on the natural heritage inventory. (Attorney General Opinion No. 88-16 concluded such siting regulations would be valid as they involve environmental protection.) Other federal statutes speak to this issue:

- (1) Endangered/threatened species. Endangered Species Act, 16 U.S.C. §§ 1531-1543
- (2) Wildlife refuges. 50 C.F.R. § 27.94. (1984)
- (3) Wetlands. § 404 of the Clean Water Act, 33 U.S.C. § 1344, and Presidential Exec. Order No. 11990, 42 Fed Reg. 26, 961 (1977)
- (4) Significant agricultural land. 7 C.F.R. pt. 658 (1985)

Other questions abound. What will become of the toxic fly ash and bottom ash from incinerators? Will they be transported to a toxic landfill or storage area, thereby creating or increasing further problems in the areas of transportation and leakage? In light of

liability questions raised by the nuclear waste issue, perhaps we should seek an opinion on what the liability arrangements would be enroute to a site as well as accidents at the site. Should consideration be made for a realistic trust fund set up with local as well as state governments in advance of construction by the applicants? Could funds provided by fees or surcharges on waste be used for immediate corrective action and increased perpetual care funds? Kansas Attorney General Opinion No. 88-16, Feb. 4, 1988, states "While a trust fund could therefor be created for the benefit of the locality, and while liability for third party claims could be provided for, such legislation would be subject to the provisions of CERCLA."

In summary, I would offer the following amendments to HB 2929:

- (1) Line 0070 should clarify the meaning of "detoxification" as it does not destroy poisons, but rather alters chemicals and releases new toxics such as dioxins.
- (2) Line 0242 extended to include all voters within a 10 mile radius.
- (3) Line 0245 to include sites not only on the natural heritage inventory, but also those designated as critical habitats of state-listed threatened and endangered species established by the Kansas Department of Wildlife and Parks.
- (4) A provision for local citizens' commissions to have input on foreseeable transportation problems.
- (5) Pursuit of more stringent liability requirements.
- (6) Baseline health and environmental impact studies conducted by independent agencies and financed by the applicants before construction of the facility, as well as continued monitoring at regular intervals of one year or less thereafter for groundwater, soil, food web, etc. concentrations, paid for by the operators.

As neighboring states pass legislation which make them less attractive to toxic waste facility developers, it would seem necessary for Kansas to have similar protection as quickly as possible. Kansas citizens deserve the same safeguards as the citizens of Oklahoma, Colorado and Nebraska.

Thank you again for this opportunity. I would appreciate a favorable consideration on HB 2929. As time allows, I would answer your questions now or later in the hearing.

June 3, 1987

Fish and Game official concerned about waste incinerator proposal

By Alan Montgomery

The Hutchinson News

PRATT — Before a hazardous waste incinerator can be built in Rice County, the developer must prove to state and federal authorities that the plant's emissions will not harm nearby wildlife refuges.

That was the word Tuesday from Bill Layher, Environmental Section supervisor at the Kansas Fish and Game Commission headquarters at Pratt.

Layher attended a public meeting last week in Chase, during which a proposed hazardous waste incinerator for the area was discussed. A Kansas Health and Environment official at the meeting said such a plant could emit traces of heavy metals, such as lead, into the air.

The Hutchinson News

That's when Layher became concerned.

"Heavy metals are quite toxic to waterfowl, especially from the standpoint of causing abnormalities in offspring," he said.

Chase is about 15 miles northeast of the 22,000-acre Quivira National Wildlife Refuge and about 16 miles east of the 15,000-acre Cheyenne Bottoms wildlife area. Quivira is managed by the U.S. Fish and Wildlife Service; Cheyenne Bottoms by the Kansas Fish and Game Commission.

Both wildlife areas are designated as "critical habitats" for a variety of endangered and threatened species, including whooping cranes, bald eagles, peregrine falcons and others.

At certain times of the year some species appear to use Cheyenne Bottoms as a staging area for their mass migrations. The numbers of some species at the habitat at one time can represent 95 percent of the species' North American population, Layher said.

"It's a sensitive ecosystem. If it were damaged, it could have a real effect on the North American bird population," he said.

Anyone who wished to build a hazardous waste incinerator in the area would have to undergo the

process of applying to the Fish and Game Commission for a "threatened and endangered species permit," he said.

There is no guarantee that such a permit would be granted.

"One of the things that bothers me is that the people who regulate the plants can't tell us exactly what is coming out of the stacks. We might require even more specific data on that than even Health and Environment would."

Layher said he was surprised that his department had not been contacted by the company that is proposing the incinerator.

"That's a little bit unusual. Usually they contact all the regulatory agencies they can find to see what regulations they must go by. Especially when they're coming from out of state."

At the U.S. Fish and Wildlife office in Manhattan, spokesman Richard Raines voiced concerns similar to Layher's.

"The Endangered Species Act would apply to this project. ... We have input and review of these permits," Raines said.

The incinerator plan was proposed by Chase businessman Merle Dupont as a way of spurring economic development in the community.



SIERRA CLUB

Kansas Chapter

HB2929: Hazardous Waste Incineration

Testimony for the Kansas Chapter of the Sierra Club before
House Energy and Natural Resources Committee

Margaret Post Ahrens

February 23, 1988

HB2929: Hazardous Waste Incineration

Testimony for the Kansas Chapter of the Sierra Club

I am Margaret Post Ahrens, lobbyist for the 2000 members of the Kansas Chapter of the Sierra Club.

HB2929 is a timely response to proposals to build or expand hazardous waste incinerators in two Kansas locations, because it opens discussion among you who make state policy relating to our air, land and water. You have an opportunity to review the issues that make the wastes we generate a worry for us all.

The hazardous waste incinerator project proposed by Vulcan Manufacturing in Wichita emphasizes the need for this discussion. Vulcan is the U.S. manufacturer of Penta products. The Environmental Protection Agency is expected to reclassify the chips and sludges that are the byproducts of Penta production. This reclassification will prohibit the further dumping of these wastes in sanitary landfills.

It is our position that incineration is an appropriate method for the treatment of hazardous waste if it is the most environmentally sound method available. We recognize that portable incinerators are sometimes brought in to clean up a contaminated site on a one-time basis.

But it is another matter to allow the building of an incinerator that is a center for burning hazardous materials for a multi-state region or nation.

It is the position of the Sierra Club that such a project must be evaluated as a whole. In order to consider the pros and cons we ask

that these questions be answered:

1. How much toxic waste will the incinerator emit into the Kansas atmosphere?

2. What happens when organic chemicals like those to be burned at Vulcan break down in the presence of heat?

3. What happens to the tons of solid hazardous ash, potentially 3000 tons per year at Vulcan, that will remain as a byproduct of incineration? Will it be landfilled? What happens if these wastes leach into groundwater?

After hearings on environmental remediation (SB455) we can assure you that getting a responsible party to clean-up groundwater contamination caused by toxic leaching is costly to us citizens and to the state. It is in the state's economic interest to prevent contamination by demanding answers to difficult questions before permitting.

HB2929 defines "incineration" as "detoxification". Indeed, we do not know that incineration "detoxifies". A more appropriate known is that the process "treats" hazardous wastes, changing them from one form to another.

You have the right to create standards more stringent than the Federal government. Because so much is unknown about wastes resulting from hazardous waste incineration, and because the Federal government is slow in its responses, we ask that you use your right.

HB2929 sets out procedures for notification of citizens, defining methods for their involvement in a siting process that could greatly impact their lives.

HB2929 also makes attempts to limit siting of such hazardous waste incinerators as Vulcan in areas of special wildlife habitats we have come to value as our Kansas natural heritage.

We urge you to show your pride in Kansas. Insist that the siting of hazardous waste incinerators in Kansas come only after careful state analysis of the actual results of incineration--the wastes that the process generates. We ask that you protect Kansas citizens by requiring notification and hearing throughout such a siting process. And we ask that you keep mindful of the charge to protect the natural heritage which we value so highly, without which we cannot live: the air, water, land and the plants and animals that sustain us.

Kansas Natural Resource Council

Testimony presented before the House Energy and Natural Resources
Committee

HB 2929: Hazardous Waste Incineration

Charlene A. Stinard, Kansas Natural Resource Council

February 23, 1988

My name is Charlene A. Stinard, and I represent the Kansas Natural Resource Council, a private, nonprofit organization which promotes sustainable natural resource policies.

One of the most serious environmental issues Kansans face is the long term management of hazardous wastes. Landfills across the state are reaching capacity, and the state ban on land burial forces the consideration of alternatives for disposal of hazardous materials.

KNRC does not oppose all incineration, but we do think it should be a last resort, after source reduction and recycling are instituted. We support HB 2929's attempt to regulate strictly this controversial disposal technique.

Three aspects of the bill are of special concern to us: local control, environmental impacts, and the "show need" provision.

LOCAL CONTROL

A legitimate concern for states, counties, and communities is the impact of dangerous technologies on the health of citizens and the protection of the environment.

To assure the maximum participation of affected communities, we support extensive public notification requirements during the permitting process.

If citizens cannot prohibit the siting of hazardous waste disposal facilities, public pressure can at least ensure that regulatory agencies heed public concerns.

ENVIRONMENTAL IMPACTS

Most of us would agree that some areas deserve higher standards of environmental protection. For example, national wildlife refuges, endangered species habitats, and groundwater supplies are granted statutory protection.

"Natural heritage inventory" (Sec. 3, line 0245) provides an inadequate standard for protection of a broad range of environmental concerns.

Stringent monitoring and frequent testing must also be required, because complete burning of hazardous wastes depends on proper operation of incineration facilities.

SHOW NEED

Future siting considerations in Kansas ought to be preceded by legislative commitment to support source reduction and recycling of usable hazardous materials before considering incineration.

Permit applicants should be required to show the need for additional facilities to dispose of hazardous materials generated and used in Kansas. Do we want to encourage importation of hazardous wastes just to feed Kansas incinerators?

HB 2929 addresses a complex and highly charged debate concerning the safe disposal of hazardous wastes. We urge your commitment to:

- (1) active, knowledgeable public participation in the permitting process,
- (2) the development of an environmental standard as a criterion of consideration, and
- (3) reducing the generation of hazardous materials, recycling, and continued study of long term hazardous waste management.



The University of Kansas

Kansas Biological Survey

To: House Committee on Energy and Natural Resources
Representative Dennis Spaniol, Chairman

From: *Edward A. Martinko*
Edward A. Martinko, State Biologist, Director, Kansas Biological Survey

RE: HB 2929 (Hazardous waste incinerators)

On behalf of the Kansas Biological Survey, I would like to express our qualified support for HB 2929 as an important first step in dealing with hazardous waste incineration. We hope your Committee will give careful consideration to the ecological provisions of this bill in an effort to properly locate such facilities and minimize their potential for environmental impacts. As the research agency responsible for studying the plants and animals of Kansas, we respectfully submit several concerns for your consideration.

Because hazardous waste incinerators can generate a wide range of pollutants that are potentially toxic, there is a clear need for a careful, systematic review of the environmental impacts of such a facility by those agencies with responsibilities for the areas outlined in lines 220 through 224 on page 6 of the bill. This environmental impact review should be specified in the bill and/or the composition of the hazardous waste disposal facility approval board should be expanded to include Wildlife and Parks, the State Biologist and other appropriate entities.

If the environmental review and the composition of the Board are expanded and specified as suggested, then line 243, beginning with "No facility..." and ending with "natural heritage inventory" on line 245 on page 7 could be removed. If the issues of environmental review and Board composition are not further addressed, line 243 through line 245 should be modified to consider adverse impacts greater than 25 miles from an ecologically sensitive area and to consider a larger number of sites as a standardized reference to include wildlife refuge areas, threatened and endangered species habitats, preservation areas, Natural and Scientific Areas, etc. This latter recommendation is made in recognition of the fact that adverse impacts may occur in a radius of 40-50 miles or more and that no one list of sites is all inclusive.

The Biological Survey is ready and willing to work with other agencies and the Legislature in an effort to address the concerns outlined here. Accordingly, we express our qualified endorsement of HB 2929 and respectfully request your careful consideration of this Bill.

Attachment 5
House Energy & NR 2-23-88

STATE OF KANSAS



DEPARTMENT OF HEALTH AND ENVIRONMENT

Forbes Field

Topeka, Kansas 66620-0001

Phone (913) 296-1500

Mike Hayden, *Governor*

Stanley C. Grant, Ph.D., *Secretary*

Gary K. Hulett, Ph.D., *Under Secretary*

Testimony Presented to

House Energy and Natural Resources Committee

by

The Kansas Department of Health and Environment

House Bill 2929

Background

Over the past decade the state of Kansas has established an effective hazardous waste management program. In fact, in 1987 a review of all state hazardous waste management programs by the Foundation for Renewable Energy and the Environment rated the Kansas program as one of the ten best in the country.

The federal regulations developed under the Resource Conservation and Recovery Act (RCRA) have served as the structural base to which a number of specific state initiatives have been added. These include 1) the establishment of a hazardous waste disposal facility siting board, 2) the prohibition of below ground burial of hazardous waste, 3) the regulation of businesses generating 25 kg or more of hazardous waste per month, and 4) the assessment of fees to support the regulatory program costs (with an exemption for generators who recycle their wastes). The program has been constructed to provide the consistency with federal requirements necessary for authorization to operate in lieu of the U.S. EPA, while including additional elements to address specific Kansas needs and priorities.

Within the department we have promoted an integrated waste management system based upon the following hierarchy of priorities:

- 1) Waste minimization to reduce the quantity of wastes being generated.
- 2) Recycling/resource recovery to beneficially reuse the waste as a raw material or to recover its energy value.
- 3) Treatment of wastes to reduce their volume, toxicity, or mobility in the environment.

- 4) Disposal of those residues left over from application of the first three approaches.

We believe it is important to recognize that no panacea exists in the area of waste management - all of the four elements must be integrated to adequately address the variety of wastes generated by business, government, and homeowners.

House Bill 2929 addresses hazardous waste incineration which is one specific type of waste treatment. As we have moved away from our dependence upon landfills, in Kansas and nationwide, incineration and other treatment methods have assumed an increasingly important role in our management of hazardous wastes. This has led to increased interest and concerns by the public regarding waste incineration. While incineration is certainly not an appropriate technology for all types of hazardous wastes, for some wastes (particularly certain organic chemical wastes) high temperature destruction is the most effective approach.

Impact of House Bill 2929

As currently written the bill would have significant impacts upon the state's regulatory program and upon hazardous waste management in Kansas:

- 1) The definition of incineration would include cement kilns and industrial furnaces which are burning hazardous waste as supplemental fuel. Presently they are not regulated under state and federal law as incinerators - EPA is promulgating specific regulations for such facilities and Kansas will likely adopt these requirements.
- 2) Requiring all hazardous waste incinerators to obtain approval from the siting board would create a significant workload for the board since the department currently has three applications under review - one offsite, commercial facility and two onsite facilities. We also anticipate receiving another application for an onsite, limited offsite facility within the next month or two.
- 3) Making the permit approval contingent upon a demonstrated need by Kansas generators and approval by adjacent property owners would create several problems.
 - a) It would likely result in EPA withdrawing authorization from the state to operate our hazardous waste regulatory program in lieu of EPA. Proceedings are underway currently by EPA to withdraw North Carolina's authorization in response to a state law that in effect would block the siting of a proposed commercial hazardous waste treatment facility. Similar legislation in Louisiana and Oklahoma also has resulted in EPA considering program withdrawal in those states.
 - b) It could seriously undermine our ability to provide the assurance of waste disposal capacity required by the Superfund Amendments and Reauthorization Act of 1986 in order to be eligible to continue receiving federal Superfund money after November 1989.

- c) Based upon court rulings on other similar state laws it is likely that such provisions would be ruled an unconstitutional restriction of interstate commerce.
- d) The provision of treatment and disposal capacity for hazardous waste is a national issue. If states attempt to close their borders to out-of-state wastes it will seriously disrupt the management system for everyone. Kansas is both an importer and exporter of hazardous wastes. We provide treatment capacity for certain types of waste generated outside Kansas and many of our businesses are dependent upon treatment and disposal capacity in other states such as Oklahoma, Alabama, and Texas.
- e) Experience in Kansas and nationwide with the Not-In-My-Back Yard (NIMBY) syndrome indicates that the landowner approval provision would operate as a de facto ban on incineration facilities. It is clear that alternatives to landfills are needed for management of hazardous wastes and, while careful review and evaluation of the proposed design and operating parameters are critical, incineration capacity can be one of the viable alternatives.

Department's Position

KDHE is opposed to House Bill 2929 in its present form due to the variety of problems enumerated above. We do believe it would be appropriate to require all offsite hazardous waste treatment facilities to be approved by the siting board, consistent with the approach currently followed for offsite disposal facilities.

Recommendation

- 1) The definition of "incineration" should be deleted or changed to make it consistent with the existing definition in state and federal regulations:

"Incineration" means any enclosed device using controlled flame combustion that neither meets the criteria for classification as a boiler nor is listed as an industrial furnace.
- 2) Only off-site hazardous waste treatment facilities should require approval by the siting board.
- 3) No requirements should be made for nearby property owner approval or demonstration of need for disposal of Kansas wastes.
- 4) The specific exclusionary language regarding areas within 25 miles of sites listed on the natural heritage inventory should be deleted. The facility siting board should consider such issues under the existing authority in K.S.A. 65-3434(f)(5).

With these changes the department would support House Bill 2929. Otherwise we must oppose it as an impediment to the development of treatment capacity for sound management of hazardous waste and because of its potential to seriously disrupt the state regulatory program for hazardous waste management.

Presented by:

Dennis R. Murphey, Director
Bureau of Waste Management
February 23, 1988

HAZARDOUS WASTE THERMAL TREATMENT FACILITIES
IN
KANSAS

COMPANY LOCATION	ON SITE/ OFF SITE	TYPE OF FACILITY	TYPE OF WASTE	EST. ANNUAL THROUGHPUT	PERMIT STATUS	COMMENTS
Vulcan Wichita	On site Only	Incinerator	Chlorinated Organics Also contains PCB	1000 Tons	Issued 1/19/87	Permit Under Appeal
KAAP Parsons	On site Only	Incinerator	Explosives	0.75 Tons (1985) (Large increase for 1988)	Interim Status	Part B Under Review
SAAP De Soto	On site Only	Incinerator	Explosives	Not in use capacity: 1560 Tons	Interim Status	Part B Under Review
General Portland Fredonia	Off site Commercial	Cement Kiln	Industrial Solvents, Paint, Inks	46,300 Tons	Issued 2/14/84	Modified Permit 12/14/87
Ash Grove Cement Co. Chanute	Off site Commercial	Cement Kiln	Industrial Solvents, Paint, Inks	38,000 Tons	Interim Status	Not Yet Operating
Heartland Cement Co. Independence	Limited Off site Commercial	Cement Kiln	Industrial Solvents, Paint, Ink	45,000 Tons	Application Submitted 6/18/87	Not Yet Operating

Proposed Facilities

COMPANY LOCATION	ON SITE/ OFF SITE	TYPE OF FACILITY	TYPE OF WASTE	EST. ANNUAL THROUGHPUT	PERMIT STATUS	COMMENTS
Vulcan Wichita	On site, Limited Off site	Incinerator	Chlorinated Organics Also contains PCB/ Dioxin	8,700 Tons	---	Application Expected 3/88
APTUS (Pyrochem) Coffeyville	Off site Commercial	Incinerator	All Haz. Wastes including PCB/ Dioxin	18,000 PCB 25,000 RCRA	Application Submitted 10/19/87	Facility Currently Operates as a PCB Incinerator Only

10,747 Tons Kansas Waste Shipped Out of State, 1985
19,426 Tons Out of State Waste Shipped to Kansas, 1985
34,400 Tons Hazardous Waste Generated by Kansans, 1985

WM/XT



James M. Boyd
Plant Manager

TESTIMONY BEFORE THE
HOUSE COMMITTEE ON ENERGY AND NATURAL RESOURCES
HOUSE BILL 2929

BY

JIM BOYD
PLANT MANAGER
VULCAN CHEMICALS COMPANY

Mr. Chairman, members of the committee, I appreciate this opportunity to comment on HB 2929. I am here because of the concern I have about the speed at which this bill was introduced and is being heard. The amendments as proposed would prevent any hazardous waste facilities from being built in the state of Kansas. In view of the recent Attorney General's opinion, such prohibition is constitutionally questionable and should be reviewed to determine if it is in the interest of the state of Kansas to propose prohibition.

Kansas has already provided for the regulation of hazardous waste facilities, including incinerators, by adoption of the RCRA regulations and making the KDHE responsible for the enforcement of those laws. The RCRA regulations have created a process that includes a technical evaluation, an assessment of environmental impact, and public input. In addition, if the Secretary should determine that a facility could be permitted, then existing redundant laws further provide for establishing a board which reviews the work of the KDHE and forms an independent decision.

With the proposed changes to K.S.A. 65-3434, this bill would nullify the efforts of both the KDHE and the review board and ask for 100% approval of local citizens. To get 100% approval on anything from a hundred people is impossible.

To many people hazardous waste is the most toxic material they can imagine. Unfortunately, however, hazardous waste is a regulatory definition and does not always accurately reflect actual risk. Actually most of this waste can be better identified as industrial trash. In some instances materials specifically excluded from hazardous waste classification by law may actually be more toxic than those being regulated. Establishing strict regulations without reserving some decision making process for the regulating agencies does not allow for future decisions in the event materials are reclassified as hazardous such as mining; oil; or even household waste.

Vulcan produces hazardous waste and although we have spent many millions to reduce the quantity, it is impossible to get to zero without treatment. Our proposed incinerator would provide for the destruction of approximately 6,500 tons/year of hazardous and non-hazardous materials. In the process, a weight reduction of approximately 30 to 50% will be accomplished while producing an ash that will be non-hazardous and suitable for landfill. Of all the toxic materials fed to the incinerator, it is currently calculated that less than two pounds would be lost to the atmosphere per year. Incineration is an important means of addressing the hazardous waste concerns of Kansas and should not be prohibited without reviewing the technical merits on a case by case basis.

Specifically, while we support the current Kansas environmental laws, we view the modifications proposed to K.S.A. 65-3434 and K.S.A. 65-3430 as being unnecessary modifications and therefore oppose HB 2929. Since this issue is complex and if the committee anticipates that further action upon this bill is required, then we would request the opportunity to provide additional information at that time..

Thank you.

STATE OF KANSAS

JIM RUSSELL
REPRESENTATIVE, SEVENTH DISTRICT
704 SPRUCE
COFFEYVILLE, KANSAS 67337
(316) 251-1615



TOPEKA

HOUSE OF
REPRESENTATIVES
February 23, 1988

COMMITTEE ASSIGNMENTS
MEMBER: COMMERCIAL AND FINANCIAL INSTITUTIONS
ELECTIONS
TRANSPORTATION

TO: House Natural Resources Committee

SUBJECT: H.B. 2929

Thank you for the opportunity to appear before you today.

I will be introducing you to Mr. Chris Logelin, Director of Environment for APTUS. APTUS is a recent corporate consolidation in Coffeyville consisting of Westinghouse Speciality Services, National Electric Incorporated, and Pyrochem.

APTUS moved to Coffeyville in 1984 and hired less than 12 employees. In 1984, our unemployment rate in Montgomery County was 16%.

As would be expected, there was a lot of controversy when a PCB incinerator moved to Coffeyville.

Today (3 1/2 years later), APTUS employs 400 people. The controversy is over and forgotten, and Coffeyville is proud to be the home office for a dynamic company that is expanding throughout the United States in an industry with tremendous growth potential.

I stand for questions.

Attachment 8
House Energy & NR 2-23-88
Jim Russell



P.O. Box 935, Coffeyville, KS 67337 (316) 251-6380 1-800-345-6573

Testimony on House Bill No 2929

Before the Kansas House Committee
on Energy and Natural Resources

Presented by: Chris Logelin
Manager of Environmental Affairs
Aptus-Coffeyville, Kansas

Attachment 9
House Energy & NR 2-23-88

NATIONAL ELECTRIC
LAKEVILLE, MINN.

"Equal Opportunity Employer"

NATIONAL ELECTRIC
COFFEYVILLE, KANSAS

Chairman Spaniol, Honorable Committee Members:

(My name is Chris Logelin, Manager of Environmental Affairs for Aptus, Coffeyville, Kansas.)

Thank you for this opportunity to appear before your Committee and to present testimony on behalf of Aptus on House Bill 2929.

Aptus is a partnership between National Electric, Inc. and Westinghouse Specialty Service, a wholly owned subsidiary of Westinghouse Electric. We own and operate a full-service integrated TSCA facility, including an incinerator, near Coffeyville, Kansas. Additionally, we have submitted a permit to expand the number of wastes handled by our incinerator.

Aptus believes that the quality of life of the citizens of Kansas is based upon not only clean air and water and a safe environment, but also upon a large variety of consumer goods and services produced and provided by the manufacturing and service industries. The complex processes that produce these goods and services also generate waste by-products, some of which are hazardous to the public health and to the environment.

Safe and responsible management of hazardous wastes is one of the most important environmental considerations facing Kansas. This management

is critical because it holds the key to the protection of the public health and the environment and also the simultaneous and sometimes competing need for economic growth. If environmentally sound hazardous waste facilities are not available to effectively manage the hazardous wastes produced by the many industries of the state, The state's economic activity will be hampered, and public health and the environment will be threatened by increased illegal disposal and use of outmoded treatment practices.

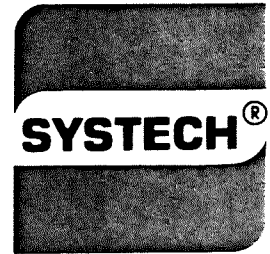
The complex RCRA permitting process, capably administered by the Kansas Department of Health and Environment, is the simplest and most effective mechanism to determine which incineration facilities can or will meet the requirements of NEPA, local zoning, RCRA, TSCA, the Clean Air Act, including NESHAPS, and the Clean Water Act.

The RCRA permitting process also requires broad public participation and includes a number of opportunities for public comment before any permit is issued.

Aptus believes that Section 3 of House Bill 2929 may be inconsistent with current federal and state hazardous waste regulations, and may threaten that State of Kansas in its efforts to maintain RCRA primacy. We also believe the section may undermine the State's ability to assure hazardous waste capacity under SARA.

Aptus has enjoyed a successful relationship with the public at our Coffeyville facility. We maintain an "open door" policy at all times, and we are in the process of interacting with the public regarding our RCRA permit application.

We believe that RCRA and other regulations adequately safeguard the residents of Kansas and that House Bill 2929 is duplicative and unnecessary, and may actually hamper the State's ability to professionally regulate hazardous waste facilities. Aptus urges this Committee to reject House Bill 2929.



February 23, 1988

specialists in environmental technology

SYSTECH CORPORATION

The Honorable Dennis Spaniol
Chairman, Energy and Natural Resources Committee
Kansas House
State Capitol
Topeka, Kansas 66612

CORPORATE OFFICE

245 North Valley Road
Xenia, Ohio 45385-9354
513/372-8077
513/429-2533
Telecopy 513/372-8099
Telex 516724

Re: PROPOSED HB 2929

Dear Chairman Spaniol,

OPERATING PLANTS

Thank you for giving us the opportunity to present our views concerning the proposed House Bill (HB 2929).

OHIO PLANT
P.O. Box 266
County Road 176
Paulding, OH 45879
419/399-4835 (Plant)
513/372-8077 (Sales)

Systech and Lafarge Corporation (formerly General Portland Inc.) have been managing hazardous wastes by burning them as fuel in cement kilns in Fredonia, Kansas since 1982. We provide a service needed by industries everywhere. Being located in Kansas, we provide necessary services and benefits for business in the state.

CALIFORNIA PLANT
P.O. Box 837
County Road 138
Lebec, CA 93243
805/248-6749 (Plant)
213/325-2800 (Sales)

We view HB 2929 as unnecessary and counterproductive in light of the extensive hazardous waste regulations already in place. Indeed, as it reads, HB 2929 would have negative effects on us and the businesses we serve without providing environmental benefits.

KANSAS PLANT
P.O. Box 29
South Cement Road
Fredonia, KS 66736
316/378-4451 (Plant)
513/372-8077 (Sales)

I have enclosed a written summary of our presentation for your consideration.

ALABAMA PLANT
P.O. Box 1097
Arcola Road
Demopolis, AL 36732
205/289-3222 (Plant)
513/372-8077 (Sales)

Sincerely,

MICHIGAN PLANT
P.O. Box 588
1480 Ford Avenue
Alpena, MI 49707
517/354-3122 (Plant)
513/372-8077 (Sales)

Paul J. Peters, PH.D.
Site Manager
Fredonia Waste Management Facility

INDIANA PLANT
P.O. Box 485
Limedale Road
Greencastle, IN 46135
317/653-2606 (Plant)
513/372-8077 (Sales)

cc: Members of Natural Resources Committee

Comments of Systech Corporation
on Proposed HB 2929
Presented by Dr. Paul J. Peters

Systech Corporation is an environmental technology company owned by Lafarge Corporation, one of North America's largest cement manufacturers. Systech operates waste management facilities in six states. These facilities are located at cement plants where hazardous wastes are blended into fuel for the cement kilns. At these six facilities, Systech has safely managed over 150 million gallons (580,000 tons) of waste. These wastes have been used to replace fossil fuels such as coal.

All of these facilities, including the one in Fredonia, must obtain permits for the storage of hazardous waste under the federal Resource Conservation and Recovery Act. (RCRA). In Kansas, this program is administered by the Kansas Department of Health and Environment (KDHE). In order to obtain a permit, under existing laws, the application must be approved by KDHE, a public hearing must be held, if requested by the public, and the Secretary of Health and Environment must approve the permit. The permit can not be approved without public participation. There have already been two public hearings in Fredonia on our permit to receive, blend and store hazardous waste.

Most people support burning of hazardous waste in cement kilns as an environmentally sound technology. The burning of hazardous waste for resource recovery in industrial furnaces, such as cement kilns, has not been regulated as incineration. However, on May 6, 1987, the U.S. Environmental Protection Agency (EPA) proposed rules to regulate burning of hazardous waste in industrial furnaces and boilers which are similar to the incinerator standards. We support the need for technical review, public participation and permitting for incinerators, boilers and furnaces burning hazardous waste. Each applicant must demonstrate that his program will protect public health and the environment. However, as proposed, HB 2929 would effectively prohibit incinerators or industrial furnaces from burning hazardous waste. Even the Fredonia Cement Plant, with an established record of performance and a history of public support, could not obtain written approval from every citizen within five miles. Such a requirement is unreasonable and certainly not necessary to protect the environment.

The burning of waste in the cement kilns at Fredonia provides a number of benefits for the state of Kansas in particular and the United States in general.

- High temperature combustion is one of the best technologies for managing organic wastes.
- Cement kilns operate at extremely high temperatures (greater than 3000⁰F) and have been shown to be excellent for destroying organic materials.
- Cement kilns provide an economical means of waste treatment for industries in Kansas, both large and small.
- The cost of treatment for Kansas waste is subsidized by out-of-state waste because these wastes provide enough volume to make our project economically attractive.
- Co-processing of wastes in kilns helps keep the cement industry in Kansas profitable, and without waste management, older plants may be forced out of business.
- Burning waste in kilns conserves non-renewable fossil fuel resources.
- Waste management in the state creates jobs in Kansas.

In general, incineration and burning for resource recovery have been accepted by regulatory agencies as excellent technologies which provide for protection of health and the environment. High temperature incineration is gaining acceptance by the general public. We believe that the U.S. EPA and KDHE have been diligent in the promulgation and enforcement of regulations for hazardous waste management, including incineration. We do not believe that HB 2929 is needed. In fact, HB 2929 will be counterproductive and discourage responsible waste management in Kansas.

February 23, 1988

TO: HOUSE COMMITTEE ON ENERGY
AND NATURAL RESOURCES

FROM: BERNIE KOCH
WICHITA AREA CHAMBER OF COMMERCE

RE: H.B. 2929

Mr. Chairman, members of the committee...

I'm Bernie Koch with the Wichita Area Chamber of Commerce. Thank you for the opportunity to testify on H.B. 2929. I'll be brief.

We believe that we should use the best technology and safest means possible to dispose of the waste created by our society. More and more cities and counties in this country are turning away from landfills and looking at serious alternatives, primarily modern incinerators. It's my understanding that many of those local governments are in Kansas.

In the Wichita/Sedgwick County area, local government and business has been studying a concept called resource recovery for at least eight years. Both residential and industrial waste would be burned in an incinerator, which would generate steam. Steam is commonly used in many manufacturing processes, especially in the aircraft industry. Not only could we dispose of our waste, we could reduce the cost by turning it into something useful.

Our primary purpose in looking at incineration is our concern with the environment. The Brooks Landfill, the primary means of waste disposal in the Wichita area, was opened several years ago immediately adjacent to the Arkansas River. It was obviously a mistake and there's concern about water contamination. We don't want another landfill if we can help it. One of our options is incineration.

Our concern with this bill is that it might preclude incinerators in some way.

Additionally, the language on page 7 of the bill about the need for such facilities seems to force business and industry to transport hazardous waste out of state, even though a cheaper, safer alternative may be possible locally.

Thank you for the opportunity to testify. I'll attempt to answer any questions.



SEDGWICK COUNTY, KANSAS

Intergovernmental Coordinator

WILLIE MARTIN

Old County Courthouse
510 N. Main Suite 601
Wichita, KS 67202-3704
(316) 268-7552

TO: House Energy and Natural Resources
FROM: Willie Martin, Intergovernmental Coordinator
DATE: February 23, 1988
SUBJECT: House Bill 2929

Mr. Chairman, and Members of the Committee:

I am Willie Martin, representing the Board of Sedgwick County Commissioners. I appreciate this opportunity to testify concerning HB 2929.

Sedgwick County is very concerned over the proposed legislation. I have provided you with technical comments made by Dr. Hahn, Sedgwick County's Director of Environmental Resources. Dr. Hahn regrets that he could not be here today to present his concerns in person but he had a prior commitment that he was unable to reschedule.

Dr. Hahn has given very specific and technical comments about his concerns. We have included a copy of the Attorney General's Opinion No. 88-16, which reinforce some of his comments.

I will not presume to have the technical expertise to present Dr. Hahn's concerns, but will again express our regrets that he was unable to be here today and assure you that he will make himself available to answer questions at your convenience.

WM:tlb



DEPARTMENT OF ENVIRONMENTAL RESOURCES

HISTORIC COURTHOUSE
510 NORTH MAIN
WICHITA KANSAS

TELEPHONE: (316) 268-7380

February 18, 1988

TO: Willie Martin
Intergovernmental Coordinator

FROM: Dr. D. R. Hahn, Director *drh*
Sedgwick County Dept. of Environmental Resources

RE: Review and Critique of House Bill No. 2929

As per your request, I have reviewed House Bill No. 2929 concerning and limiting the incineration of hazardous waste. This legislation has critically important implications for the citizens of Sedgwick County and, in my professional opinion, we should vehemently oppose the bill.

Before listing the reasons for opposing H.B. 2929, it would be appropriate to sketch the philosophy and position from which I view such legislation. Enormous quantities of hazardous wastes are generated each year in the United States, as well as other countries. Many of these hazardous wastes pose risks to human health and to the environment. The latter considerations have lead to increased regulation in the management and disposal of such materials.

The reason for the generation of such large quantities of hazardous wastes in the United States is that the citizens of this country demand an array of products and materials in their lives which contain or cause the generation of hazardous wastes in their manufacture. A quick perusal of each of our homes, our garages, our motor vehicles, and our businesses would generate a very long list of items we accept and use regularly which either contain hazardous waste or cause the generation of hazardous waste in their manufacture. In that sense, each citizen causes the generation of hazardous waste and other regulated compounds.

It seems to me that if we are mature, responsible citizens and active members of our society and if we continue to demand and purchase items containing or causing the generation of hazardous wastes, then we, the citizens and general public, bear responsibility for the safe management and disposal of such hazardous

wastes. Active management and disposal of such wastes is required. I strongly submit that opposition to proven methods of disposal or ignoring hazardous wastes assuming they will disappear or blaming hazardous waste generation on industry rather than accepting our share of responsibility for waste generation through our patterns of product consumption are neither mature nor responsible positions. The result of such positions is usually that such wastes may be dispersed indiscriminately throughout our environment in unadulterated forms. The irony of this situation is that well-meaning citizens who emotionally oppose proven and managed methods of waste disposal usually wind up creating human health and environmental risks through their actions.

Proper management and disposal of hazardous wastes requires positive, constructive action. Negative action or non-action are counterproductive. An array of alternatives exists for proper disposal of hazardous wastes. The characteristics of the waste determine the best method(s) of disposal. None of the alternatives will safely handle all of the kinds of hazardous wastes. As is true with any aspect of science and technology, none of the hazardous waste disposal techniques are perfect; they can only predict high probabilities of success. Yet, such methods even with some flaws are superior to non-action or subscription to Walt Disney's First Law: Wishing will make it so. One method for the safe and effective destruction of certain hazardous wastes is high temperature incineration of such materials. Both research and field testing have demonstrated time and again that thermal destruction of certain hazardous wastes is effective to very high levels, the regulatory 6-nines or 99.9999%. Wouldn't it be wonderful if other aspects of our lives had such levels of assurance? Furthermore, such incineration is highly regulated and carefully monitored. Indeed, the U.S. Environmental Protection Agency, as a matter of policy, has adopted incineration as the method of choice for the destruction of many wastes. In our efforts to protect both human health and the environment, it would seem foolish to preclude any proven method.

The previous four paragraphs briefly convey my perspective on the management and disposal of hazardous wastes and the role of incineration in such activity. Those paragraphs also define the viewpoint I bring to reviewing H.B. 2929. After reviewing the bill, it is my opinion that it is seriously flawed and actually has the opposite effect of that intended, the safe management and disposal of hazardous wastes in Kansas. I would offer the following comments in that regard:

1. The term "destruction" should be substituted for the term "detoxification" in line 70. In fact, a better choice of words would be, "Incineration means the thermal destruction of hazardous material." in lieu of lines 70 and 71.

2. The definitions for "off-site facility" (lines 91-93) and "on-site facility" (lines 94-104) leave a gap. The situation where an entity operates a facility which is located non-contiguous to any of its other operations is not addressed.
3. The sentence contained in Section 2(a) (lines 170-174) does not make sense and lacks a direct object of the verb. The secretary shall notify the specified members of what?
4. Lines 236-239 engage a stipulation that the applicant for a hazardous waste facility must demonstrate a need for such a facility by Kansas generators. That section should be struck from the bill. First, it is extremely unlikely that anyone would build such a facility in Kansas without some local waste coming to the facility. Obviously, the operation will be built somewhere near the waste stream for economic reasons.
Second, I suspect that this section violates federal law and the federal constitution regarding interstate commerce and free trade. The Supreme Court of the United States has ruled several times on this matter with regard to waste transport and disposal. Non-Kansas waste cannot be barred if that is what the bill's authors have in mind.
Third, what constitutes "need" and how does the applicant demonstrate it? Does the state of Kansas currently ban products, commodities, and materials from entering Kansas unless Kansans demonstrate that they "need" them? Are new businesses and new manufacturing plants banned from Kansas unless Kansas "needs" them? Are new residents banned from the state unless they are "needed"?
5. New Section 3 (lines 240-249) states that a hazardous waste incinerator cannot be sited unless the property owners within 5 miles of the site give written permission. Such a provision is tantamount to a ban on incineration and should be struck from the bill. Area property owners will not give permission for any development, except perhaps single family dwellings, much less a hazardous waste disposal facility.
Our society desperately needs proven, safe hazardous waste management and disposal. It is clearly in the best interests of society, i.e. the most people, to provide such services. Incineration is one proven option. To preclude the best interests of the public at large for the parochial interests of a few is

unwise and irresponsible as per my comments in previous paragraphs. I further suspect that this section could be viewed as an "arbitrary and capricious" denial of rights.

6. The bill is directed toward the incineration of hazardous wastes. Hazardous wastes presumably excludes "household waste" (see lines 51 and 52). However, every household discards items which contain small quantities of materials classified as hazardous by various regulatory agencies. Does that consideration bring household trash under the aegis of the bill? What about commercial waste and some industrial wastes, which are usually deemed non-hazardous? The bill doesn't indicate the status of such wastes. In short, I have a very serious concern that H.B. 2929 could be construed to ban solid waste-to-energy incineration in Kansas. The latter consideration has adverse impacts for Sedgwick County as well as other areas of the state.

In summary, I strongly oppose House Bill 2929. I would urge you to re-read my comments in the second, third, fourth, and fifth paragraphs of this memorandum. In light of those comments, H.B. 2929 is unwise, un-needed, negative, counter-productive, and counter to the long-term interests of Kansans. If you have any questions about my comments, please contact me.

cmh



DEPARTMENT OF ENVIRONMENTAL RESOURCES

HISTORIC COURTHOUSE
510 NORTH MAIN
WICHITA KANSAS

TELEPHONE: (316) 268-7380

February 18, 1988

TO: Willie Martin
Intergovernmental Coordinator

FROM: Dr. D. R. Hahn, Director *drh*
Sedgwick County Dept. of Environmental Resources

RE: Review and Critique of House Bill No. 2929

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Before listing the reasons for opposing H.B. 2929, it would be appropriate to sketch the philosophy and position from which I view such legislation. Enormous quantities of hazardous wastes are generated each year in the United States, as well as other countries. Many of these hazardous wastes pose risks to human health and to the environment. The latter considerations have lead to increased regulation in the management and disposal of such materials.

The reason for the generation of such large quantities of hazardous wastes in the United States is that the citizens of this country demand an array of products and materials in their lives which contain or cause the generation of hazardous wastes in their manufacture. A quick perusal of each of our homes, our garages, our motor vehicles, and our businesses would generate a very long list of items we accept and use regularly which either contain hazardous waste or cause the generation of hazardous waste in their manufacture. In that sense, each citizen causes the generation of hazardous waste and other regulated compounds.

It seems to me that if we are mature, responsible citizens and active members of our society and if we continue to demand and purchase items containing or causing the generation of hazardous wastes, then we, the citizens and general public, bear responsibility for the safe management and disposal of such hazardous

wastes. Active management and disposal of such wastes is required. I strongly submit that opposition to proven methods of disposal or ignoring hazardous wastes assuming they will disappear or blaming hazardous waste generation on industry rather than accepting our share of responsibility for waste generation through our patterns of product consumption are neither mature nor responsible positions. The result of such positions is usually that such wastes may be dispersed indiscriminately throughout our environment in unadulterated forms. The irony of this situation is that well-meaning citizens who emotionally oppose proven and managed methods of waste disposal usually wind up creating human health and environmental risks through their actions.

Proper management and disposal of hazardous wastes requires positive, constructive action. Negative action or non-action are counterproductive. An array of alternatives exists for proper disposal of hazardous wastes. The characteristics of the waste determine the best method(s) of disposal. None of the alternatives will safely handle all of the kinds of hazardous wastes. As is true with any aspect of science and technology, none of the hazardous waste disposal techniques are perfect; they can only predict high probabilities of success. Yet, such methods even with some flaws are superior to non-action or subscription to Walt Disney's First Law: Wishing will make it so. One method for the safe and effective destruction of certain hazardous wastes is high temperature incineration of such materials. Both research and field testing have demonstrated time and again that thermal destruction of certain hazardous wastes is effective to very high levels, the regulatory 6-nines or 99.9999%. Wouldn't it be wonderful if other aspects of our lives had such levels of assurance? Furthermore, such incineration is highly regulated and carefully monitored. Indeed, the U.S. Environmental Protection Agency, as a matter of policy, has adopted incineration as the method of choice for the destruction of many wastes. In our efforts to protect both human health and the environment, it would seem foolish to preclude any proven method.

The previous four paragraphs briefly convey my perspective on the management and disposal of hazardous wastes and the role of incineration in such activity. Those paragraphs also define the viewpoint I bring to reviewing H.B. 2929. After reviewing the bill, it is my opinion that it is seriously flawed and actually has the opposite effect of that intended, the safe management and disposal of hazardous wastes in Kansas. I would offer the following comments in that regard:

1. The term "destruction" should be substituted for the term "detoxification" in line 70. In fact, a better choice of words would be, "Incineration means the thermal destruction of hazardous material." in lieu of lines 70 and 71.

2. The definitions for "off-site facility" (lines 91-93) and "on-site facility" (lines 94-104) leave a gap. The situation where an entity operates a facility which is located non-contiguous to any of its other operations is not addressed.
3. The sentence contained in Section 2(a) (lines 170-174) does not make sense and lacks a direct object of the verb. The secretary shall notify the specified members of what?
4. Lines 236-239 engage a stipulation that the applicant for a hazardous waste facility must demonstrate a need for such a facility by Kansas generators. That section should be struck from the bill. First, it is extremely unlikely that anyone would build such a facility in Kansas without some local waste coming to the facility. Obviously, the operation will be built somewhere near the waste stream for economic reasons.
Second, I suspect that this section violates federal law and the federal constitution regarding interstate commerce and free trade. The Supreme Court of the United States has ruled several times on this matter with regard to waste transport and disposal. Non-Kansas waste cannot be barred if that is what the bill's authors have in mind.
Third, what constitutes "need" and how does the applicant demonstrate it? Does the state of Kansas currently ban products, commodities, and materials from entering Kansas unless Kansans demonstrate that they "need" them? Are new businesses and new manufacturing plants banned from Kansas unless Kansas "needs" them? Are new residents banned from the state unless they are "needed"?
5. New Section 3 (lines 240-249) states that a hazardous waste incinerator cannot be sited unless the property owners within 5 miles of the site give written permission. Such a provision is tantamount to a ban on incineration and should be struck from the bill. Area property owners will not give permission for any development, except perhaps single family dwellings, much less a hazardous waste disposal facility.
Our society desperately needs proven, safe hazardous waste management and disposal. It is clearly in the best interests of society, i.e. the most people, to provide such services. Incineration is one proven option. To preclude the best interests of the public at large for the parochial interests of a few is

unwise and irresponsible as per my comments in previous paragraphs. I further suspect that this section could be viewed as an "arbitrary and capricious" denial of rights.

6. The bill is directed toward the incineration of hazardous wastes. Hazardous wastes presumably excludes "household waste" (see lines 51 and 52). However, every household discards items which contain small quantities of materials classified as hazardous by various regulatory agencies. Does that consideration bring household trash under the aegis of the bill? What about commercial waste and some industrial wastes, which are usually deemed non-hazardous? The bill doesn't indicate the status of such wastes. In short, I have a very serious concern that H.B. 2929 could be construed to ban solid waste-to-energy incineration in Kansas. The latter consideration has adverse impacts for Sedgwick County as well as other areas of the state.

In summary, I strongly oppose House Bill 2929. I would urge you to re-read my comments in the second, third, fourth, and fifth paragraphs of this memorandum. In light of those comments, H.B. 2929 is unwise, un-needed, negative, counter-productive, and counter to the long-term interests of Kansans. If you have any questions about my comments, please contact me.

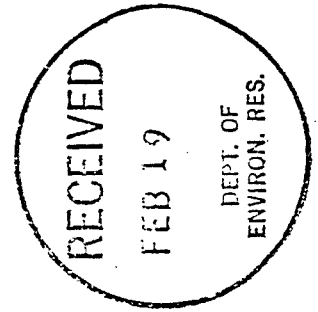
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STATE OF KANSAS

OFFICE OF THE ATTORNEY GENERAL

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ROBERT T. STEPHAN
ATTORNEY GENERAL

February 4, 1988

~~ATTORNEY GENERAL~~ OPINION NO. 88-16

The Honorable Leroy F. Fry
State Representative, One Hundred Fifth District
Statehouse, Room 272 West
Topeka, Kansas 66612

Re: Public Health -- Solid and Hazardous Waste;
Hazardous Wastes -- Location of Disposal Facilities

Synopsis: State regulation of hazardous materials must not be inconsistent with federal law. Local legislation regulating hazardous waste must not be inconsistent with state and federal law. Thus, a county ordinance prohibiting a hazardous waste incinerator within the county's borders would not be a valid exercise of home rule powers, and a popular vote of local electors may not be required prior to granting a permit to a hazardous waste treatment facility.

State requirements may be more stringent than those imposed by federal law, as long as the state law is consistent with federal law. The proximity of a natural area or endangered species habitat is a factor to be considered in granting a facility permit. A state may prohibit siting a facility in close proximity to such an area or habitat, subject to constitutional considerations. The state may not place a surcharge or ban on incineration of out-of-state waste. Cited herein: K.S.A. 1987 Supp. 19-101a; K.S.A. 32-501; 32-506; 65-3430; 65-3433; 65-3434; K.S.A. 1987 Supp. 65-3436; K.S.A. 65-3438; 74-6601; 74-6603; 74-6604; 74-6607; 74-6609; 76-338; U.S. Const., Art. I, § 8, cl. 3; 42 U.S.C. §§ 6901; 6926(b); 6929; 9601, 9614

(1986); 49 U.S.C. §§ 1801; 1805; 1811 (1986); 40
C.F.R. § 271.4 (1986).

Dear Representative Fry:

As Representative for the One Hundred Fifth District, you have requested our opinion concerning the treatment of hazardous waste. Specifically, you have inquired about several issues regarding the siting of hazardous waste incinerators.

As a general overview, the treatment, storage and disposal of hazardous waste is regulated under authority of the Resource Conservation and Recovery Act of 1976, Pub.L. 89-272, Title II (now codified at 42 U.S.C. § 6901 et seq., hereinafter referred to as RCRA). Pursuant to 42 U.S.C. § 6926(b), a state may operate its own hazardous waste program in lieu of the federal program if the state plan is approved. The State of Kansas operates its own program, codified at K.S.A. 65-3430 et seq., final federal authorization of which was effective on October 17, 1985. 50 Fed. Reg. 40377, October 3, 1985. This approval is subject to the federal regulatory program if federal law, specifically the Hazardous and Solid Waste Amendments of 1984, Pub.L. 98-616, is more stringent. If state law is more stringent, however, then state controls, 50 Fed. Reg. 40378, October 3, 1985, though state law may not be so strict as to be in conflict with the congressional objectives of providing a safe and responsible means of handling hazardous waste.

I. Your first question is whether a county may use its zoning power to prohibit the location of hazardous waste incinerators within the county. County home rule powers are established by K.S.A. 1987 Supp. 19-101a. Subsection (a)(1) of that statute states that counties are subject to legislative acts having uniform applicability to all counties. In Missouri Pacific Railroad v. Board of Greelev County Comm'rs, 231 Kan. 225 (1982), the court held that counties were empowered to perform local legislation as may be appropriate. However, if the state legislature manifests a clear intention that the state law is applicable throughout the state, then the local body is preempted from enacting ordinances which are conflicting. 231 Kan. at 227. We believe that such intent is manifest in the hazardous waste statutes. The secretary of health and environment issues permits to treatment facilities. K.S.A. 65-3433(a). A local ordinance, permit or other requirement may not prohibit construction or modification of, or transportation to a facility, K.S.A. 1987

Supp. 65-3436(a), or prohibit the operation of such a facility. K.S.A. 65-3438.

As in Missouri Pacific Railroad, the legislature has enacted a comprehensive regulatory framework, and has manifested an intent to preempt local action which would nullify a state permit. While the term "local" is not defined for purposes of this act, it is our opinion that it includes counties. ~~Therefore, our opinion that a county could not enact a regulation through its zoning powers or otherwise, prohibiting a hazardous waste treatment facility within its borders.~~

II. ~~Your second question is whether the state could enact legislation requiring local approval of the siting of the facility.~~ In Stablex Corp. v. Town of Hooksett, 18 ERC 1671 (N.H. S.Ct. 1982) it was held that a local ordinance requiring a positive popular vote prior to constructing a hazardous waste facility was preempted by New Hampshire law. The question of federal preemption was not raised. Federal preemption was raised, however, in ENSCO v. Dumas, 807 F.2d 743, 25 ERC 1486 (8th Cir. 1986), when the court struck a county ordinance banning storage, treatment or disposal facilities within its borders. While 42 U.S.C. § 6929 (quoted infra, at page 4) prevents the conclusion that all state and local regulation is preempted, such regulation is invalid to the extent it conflicts with federal law. ~~A voter approval requirement could effectively nullify any chance of a facility being sited in the state. This would be contrary to the Congressional findings in RCRA, where there is a need for safe disposal and treatment of hazardous waste. A law authorizing a practical ban on such waste would result in its handling in a manner not deemed safe by Congress and the EPA. 807 F.2d at 745. Therefore, it is our opinion that to the extent that requiring a popular vote prior to granting a facility a permit conflicts with the Congressional purpose of RCRA, such a law would be preempted by federal law.~~

III. ~~Your next inquiry is whether it would be permissible for the State to expand on current environmental criteria set by the EPA for siting of hazardous waste incinerators, including more stringent emission standards for incineration. We have previously cited 42 U.S.C. § 6929 which retains a certain amount of authority in state and local governments. That section of the federal act states in relevant part:~~

"Nothing in this chapter shall be construed to prohibit any State or political subdivision thereof from

imposing any requirements, including those for site selection, which are more stringent than those imposed by [regulations promulgated under RCRA]." 42 U.S.C. § 6929 (1986).

In City of Philadelphia v. New Jersey, 437 U.S. 617, 57 L.Ed. 2d 475, 11 ERC 1770 (1978), the Court held that, while a New Jersey statute prohibiting importation of out-of-state waste violated the Commerce Clause, based upon a prior version of §6929, the state law was not preempted. The requirement of consistency has been adopted by the EPA in the form of regulation 40 C.F.R. § 271.4. That section requires that to obtain approval, a state program must be consistent with federal law. Subsection (b) of that regulation provides:

"Any aspect of state law or of the state program which has no basis in human health or environmental protection and which acts as a prohibition on the treatment, storage or disposal of hazardous waste in the state may be deemed inconsistent." 40 C.F.R. § 271.4(b) (1986).

~~Based on the foregoing, it is our opinion that more stringent emission standards which have a basis in human health or environmental protection would be a valid exercise of state power. Such standards would be inconsistent with federal law if they were not based on health or environmental protection concerns, and if they served as a practical ban on any facility being sited in the state.~~

IV. ~~Your third and fifth questions have been consolidated as they are closely related. You ask whether it would be permissible to deny the siting of a facility within a certain radius of a natural area listed on the Kansas Biological Survey's natural heritage inventory, and whether the natural and scenic areas preservation act or the nongame and endangered species conservation act affect the siting decision.~~

The Kansas Biological Survey is operated by the University of Kansas, and is established pursuant to K.S.A. 76-338. The powers and duties of the Survey are outlined in the natural and scientific areas preservation act, K.S.A. 74-6601 et seq. One function of the Survey is to develop an inventory of natural and scientific areas. K.S.A. 74-6607(e). Natural and scientific areas are defined by K.S.A. 74-6603(a). According to the statutory definition, such an area need not be kept completely natural and undisturbed. An area may be deemed suitable for inclusion in the state system of natural

and scientific preserves and formally dedicated as such.
K.S.A. 74-6604, 74-6609. A preserve is defined as an area

"to be maintained as nearly as possible in its natural condition and to be used in a manner and under limitations consistent with its continued preservation, without impairment, disturbance, or artificial development except that deemed necessary for scientific research, education, or public interpretation of the area."
K.S.A. 74-6603(b).

The nongame and endangered species conservation act, K.S.A. 32-501 et seq., empowers the Department of Wildlife and Parks to develop information and list wildlife whose continued existence is in jeopardy. One aspect of the act includes the commission's authority to acquire land or aquatic habitats for the conservation of endangered species. K.S.A. 32-506.

General reference appears in the hazardous waste statutes which reflects environmental concerns. See, e.g., K.S.A. 65-3434. While citation to the specific acts discussed above is not made, the probable effect on the environment is one factor to be included in the public notice which is required prior to a public hearing on a proposed facility. It would appear that environmental concerns are important considerations in approving a facility application. In short, we believe that the proximity of a natural and scientific area or preserve, or the presence of an endangered species do not automatically result in denial of an application for a permit, however, such factors are important considerations.

In addition, we believe that legislation could require that a facility not be sited within a certain distance from an area listed on the natural heritage inventory. We stated previously that 42 U.S.C. § 6929 allows a state to impose requirements which are more stringent than those imposed by federal law, subject to the provisions of 40 C.F.R. § 271.4 mandating consistency with federal law. As noted, state programs having no basis in health or environmental protection may be deemed inconsistent. In our opinion, a state law would be valid if based on a legislative finding that, in order to protect the environment, no hazardous waste facility may be constructed near such an area. Caution should be used, however, to avoid vagueness or use of an arbitrary distance.

VI. -- Your sixth question is whether it would be permissible to amend the state statutes to (1) allow local legislation which requires reporting shipments of waste to local law enforcement

for ~~escort~~ service, (2) mandate the creation of an environmental trust fund in the name of the locality to cover accidents, and (3) provide for civil liability for third party claims.

We have previously noted that local law may not be inconsistent with federal law. Further, state and local legislation is restricted by the Commerce Clause of the United States Constitution. Regarding local regulation of hazardous waste transportation, we note that Congress has enacted the Hazardous Materials Transportation Act, 49 U.S.C. §§ 1801 et seq. (1986). Pursuant to that act, the United States Secretary of Transportation is authorized to promulgate rules and regulations for handling hazardous materials. 49 U.S.C. § 1805. We know of no regulation specifically dealing with law enforcement escorts for carriers. The act specifically provides that the state and its political subdivisions may regulate such transportation to the extent such laws are not inconsistent with federal law. 49 U.S.C. § 1811. See generally, City of New York v. U.S. Dept. of Transp., 715 F.2d 732 (2d Cir. 1983); National Tank Truck Carriers v. City of New York, 677 F.2d 270 (2d Cir. 1982). A state or local government may petition the secretary for a determination of whether a statute or ordinance is preempted. 49 U.S.C. § 1811(b).

A further constraint on local legislation is state law which specifically deals with transportation of hazardous waste, either by statute or by regulations promulgated by the Kansas Corporation Commission or Kansas Department of Transportation. Currently, state law prohibits a local ordinance which restricts transportation to a facility. K.S.A. 1987 Supp. 65-3436(a).

Regarding costs to cover liability compensation, cleanup and emergency response for hazardous waste accidents, Congress enacted the "Superfund" legislation known as CERCLA, 42 U.S.C. §§ 9601 et seq. As originally enacted, ambiguity resulted in varying interpretations of section 114 of the act, codified at 42 U.S.C. § 9614. Section 114(c) prohibited states from requiring contribution to any fund, the purpose of which was to compensate for response costs or damages otherwise compensable under CERCLA. This provision was held to preempt state law in part. See generally, Exxon Corp. v. Hunt, ___ U.S. ___, 89 L.Ed.2d 364 (1986). Section 114(c) was amended by P.L. 99-499, the Superfund Amendments and Reauthorization Act of 1986 (SARA) (codified in scattered sections throughout Title 42), to clarify that states were preempted only to the extent that they could not require contribution to funds, the purpose of which was to pay costs

or damages actually compensated by the Superfund. 1986 U.S. Code Cong. & Ad. News 2865-66. States are not preempted from imposing requirements for liability regarding hazardous substances which are in addition to CERCLA. 42 U.S.C. § 9614(a). While a trust fund could therefor be created for the benefit of the locality, and while liability for third party claims could be provided for, such legislation would be subject to the provisions of CERCLA.

VE: Your final question is whether a state may place a higher surcharge on out-of-state waste or prohibit incineration of out-of-state waste at a state or privately owned facility. We believe that such action would violate the Commerce Clause of the United States Constitution, U.S. Const., Art. I, § 8, cl. 3.

In City of Philadelphia v. New Jersey, 437 U.S. 617, 57 L.Ed.2d 475, 11 ERC 1770 (1978), the issue of state protectionism in light of the commerce clause was squarely addressed. It was held that a statute prohibiting the importation of hazardous waste burdened interstate commerce and was therefore unconstitutional. We find no reason why the rule laid down in that case would not still obtain.

Even if such a requirement were to survive constitutional scrutiny, we believe that the state program may have difficulty obtaining federal approval. As previously noted, a state program must be consistent with the federal program. By regulation,

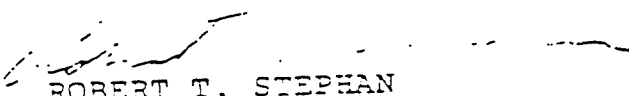
"[a]ny aspect of the State program which unreasonably restricts, impedes, or operates as a ban on the free movement across the State border of hazardous wastes from or to other States for treatment, storage, or disposal at facilities authorized to operate under the Federal or an approval State program shall be deemed inconsistent." 40 C.F.R. § 271.4(a) (1986).

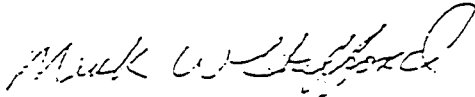
In Attorney General Opinion No. 87-43, we stated that the rule announced in Washington State Bldg. & Const. Trades v. Spellman, 684 F.2d 627 (9th Cir. 1982), cert. denied, 461 U.S. 913, 77 L.Ed.2d 282 (1983) was abrogated to some extent by subsequent amendments to the Low-Level Radioactive Waste Policy Amendments Act of 1985, Pub. L. 99-240. Therefore, it was our opinion that out-of-state disposal could be restricted subject to exceptions. Opinion No. 87-43, at page 12. We are not inconsistent with our

previous opinion when we adhere to City of Philadelphia because of our previous reliance on federal law requiring states' individual responsibility for their own low-level radioactive waste. But for the Congressional action, the rule in Spellman would have prevailed.

VII. In conclusion, it is our opinion that state and local legislation regarding hazardous materials may not be inconsistent with federal law nor may local legislation in this area be inconsistent with state law. Thus, a county ordinance prohibiting a hazardous waste incinerator within its borders would not be a valid exercise of its home rule powers, and a popular vote prior to granting a permit to an applicant is invalid as it is contrary to the Congressional purpose of RCRA. The state may require more stringent emission standards for facilities than what federal law requires, so long as state law is not inconsistent with federal law. The proximity of a natural area listed on the Biological Survey's Natural Heritage Inventory, or the presence of an endangered species are factors which may be taken into consideration in granting a permit. A state law which prohibits the siting of a facility near an area described on such inventory, or which would be near a habitat of an endangered species, may be valid as it is based on environmental protection. The state may not place a surcharge on, or prohibit, incineration of out-of-state waste at a state or privately owned facility.

Very truly yours,


ROBERT T. STEPHAN
ATTORNEY GENERAL OF KANSAS


Mark W. Stafford
Assistant Attorney General

RTS:JLM:MWS:bas

KENT CAMPBELL
REPRESENTATIVE, 107TH DISTRICT
CLOUD AND OTTAWA COUNTIES
ROUTE 1, BOX 62
MILTONVALE, KANSAS 67466



COMMITTEE ASSIGNMENTS
MEMBER: AGRICULTURE AND SMALL BUSINESS
ECONOMIC DEVELOPMENT
JOINT COMMITTEE ON ADMINISTRATIVE
RULES AND REGULATIONS
TRANSPORTATION

TOPEKA

HOUSE OF
REPRESENTATIVES

FEBRUARY 23, 1988

TESTIMONY PREPARED FOR HOUSE ENERGY & NATURAL RESOURCES
COMMITTEE ON HB 2944.

CHAIRMAN SPANIOL AND COMMITTEE MEMBERS:

I AM KENT CAMPBELL AND REPRESENT THE 107TH DISTRICT. I'M HERE TO GIVE A LITTLE BACKGROUND ON HB 2944 AND WHY IT CAME ABOUT. I'LL BE BRIEF AS THERE ARE SEVERAL CONFEREES TO FOLLOW AND THEY ARE THE REAL EXPERTS ON THE SUBJECT OF WATER QUALITY.

KANSAS RELIES HEAVILY ON GROUND WATER - IT ACCOUNTS FOR 85% OF THE STATE'S TOTAL WATER USE. IT IS ESTIMATED THAT THERE ARE IN EXCESS OF 125,000 PRIVATE WATER SOURCES UTILIZED IN THIS STATE, MOST OF THEM IN RURAL AREAS. YET ONLY A SMALL FRACTION OF THEM HAVE BEEN TESTED, PERHAPS AS FEW AS 6,000. MANY PEOPLE DO NOT EVEN REALIZE THEY SHOULD HAVE THEIR WATER TESTED PERIODICALLY; OTHERS DO NOT KNOW THE PROCEDURES FOR HAVING A TEST CONDUCTED; STILL OTHERS KNOW THEY SHOULD BUT CANNOT, OR DO NOT, PART WITH THE DOLLARS REQUIRED FOR A TEST. MANY, IF NOT MOST, OF THOSE WHO HAVE THEIR WATER TESTED BELIEVE THAT IT HAS BEEN CHECKED FOR EVERY POSSIBLE HARMFUL CONTAMINANT. THAT IS FAR FROM BEING THE CASE.

LAST YEAR I ATTENDED AN AG CHEMICAL CONFERENCE IN DES MOINES AND LISTENED TO THE PROBLEMS BEING ENCOUNTERED BY OTHER MIDWESTERN STATES. FARM CHEMICALS ARE BEING DISCOVERED IN FARM WELLS AND PUBLIC WATER SYSTEMS WITH GREATER FREQUENCY THAN EVER BEFORE. AS THE LEADING REGION FOR FARM CHEMICAL USE, THE MIDWEST IS PARTICULARLY SUSCEPTIBLE TO SUCH CONTAMINATION. HERE IN KANSAS, OFFICIALS ESTIMATE 3 IN 10 FARM WELLS CONTAIN UNACCEPTABLY HIGH LEVELS OF PESTICIDES. SUCH FINDINGS ARE PARTICULARLY DISTURBING BECAUSE SCIENTISTS KNOW SO LITTLE ABOUT THE EFFECTS OF LONG TERM EXPOSURE TO THESE CHEMICALS.

IN ANY EVENT, THE MERE PRESENCE OF SUCH CHEMICALS IN DRINKING WATER IS ENOUGH TO DISTURB MANY INDIVIDUALS. IT IS NATURAL THAT PEOPLE EXPOSED TO POTENTIALLY HARMFUL SUBSTANCES DEMAND FURTHER RESEARCH, REGULATION AND CLEAN UP. I'VE FOUND THAT TO BE TRUE AS I ATTENDED ANNUAL MEETINGS OF ORGANIZATIONS SUCH AS KANSAS ASSOCIATION OF WHEAT GROWERS, FARM BUREAU, REA, ETC, LAST FALL. YOUNG FARM FAMILIES ARE MUCH MORE HEALTH CONSCIOUS THAN JUST A FEW YEARS AGO AND THEY ARE AGITATING FOR MORE ACTION ALONG THESE LINES AS THEY FORMULATE THEIR "LEGISLATIVE AGENDAS".

THEREFORE, THE INTENT OF THIS BILL IS TO PULL TOGETHER THE EIGHT ORGANIZATIONS OR AGENCIES LISTED IN THE BILL IN A CONCENTRATED EFFORT TO FOCUS ON THREE MAIN AREAS.

- (1) PUBLIC INFORMATION OR EDUCATIONAL PROGRAMS WHICH SHOULD BE TAKEN TO ADVISE CITIZENS OF POTENTIAL SOURCES OF GROUNDWATER CONTAMINATION AND METHODS OF PROTECTING PRIVATE HOUSEHOLD WATER SUPPLIES THEREFROM:
- (2) THE NATURE OR TYPES OF TESTS WHICH SHOULD BE RECOMMENDED OR REQUIRED TO DETERMINE THE EXISTENCE OF CONTAMINANTS IN PRIVATE HOUSEHOLD WATER SUPPLIES, AND
- (3) INFORMATION WHICH SHOULD BE INCLUDED IN REPORTS MADE - BOTH THE TYPE OF CONTAMINANTS WHICH THE TEST WAS DESIGNED TO DETECT AND A CAUTION THAT THE TEST WAS NOT DESIGNED TO DETECT THE PRESENCE OF OTHER TYPES OF CONTAMINANTS.

OTHER TOPICS THAT MIGHT BE APPROPRIATE FOR CONSIDERATION BY THIS COMMISSION, IF IT BECOMES A REALITY, WOULD BE WELL CONSTRUCTION, HOME PURIFIERS, SOFTENERS OR AVAILABILITY OF OTHER TREATMENT EQUIPMENT.

IN SUMMARY, MR. CHAIRMAN, THE SUBJECT OF PROTECTING FROM CONTAMINATION PERHAPS OUR MOST PRECIOUS NATURAL RESOURCE HERE IN THE MIDWEST, GROUND-WATER, IS OF GROWING CONCERN, BOTH IN KANSAS AND ACROSS THE NATION. THOUGH WE HAVE MANY ONGOING PROGRAMS SPREAD THROUGHOUT VARIOUS STATE AND PRIVATE AGENCIES, IT WOULD SEEM THAT THE EFFORTS ARE SOMEWHAT FRAGMENTED. HB 2944 IS AN ATTEMPT TO MORE CLOSELY COORDINATE THE WORK OF THESE VARIOUS GROUPS AND FOCUS MORE QUICKLY ON THE PROBLEM AND ITS SOLUTIONS. THE BILL HAS A VERY SMALL FISCAL NOTE AND CALLS FOR A REPORT WITH RECOMMENDATIONS BACK TO THE GOVERNOR AND LEGISLATURE AT THE CONVENING OF THE 1989 SESSION.

ONE FINAL NOTE, MR. CHAIRMAN, IS THAT OF ADDITIONAL MEMBERSHIP ON THE COMMISSION. SINCE THE BILL WAS DRAFTED, IT HAS BEEN SUGGESTED TO ME

THAT IT MIGHT BE APPROPRIATE FOR THE KS DEPARTMENT OF AGRICULTURE TO BE REPRESENTED BECAUSE OF THEIR INVOLVEMENT THROUGH THEIR DIVISION OF WATER RESOURCES. FOR THAT REASON, I CONTACTED SECRETARY BROWBACK ABOUT APPEARING HERE TODAY.

THEN, IT WAS SUGGESTED THAT REPRESENTATION FROM THE PRIVATE TESTING LABORATORIES MIGHT ALSO BE APPROPRIATE. I WOULD LEAVE EXPANSION OF THE COMMISSION UP TO THE PREROGATIVE OF THE COMMITTEE.

THANK YOU FOR THE OPPORTUNITY OF APPEARING BEFORE YOU AND I'D BE HAPPY TO ANSWER ANY QUESTIONS.

I'm Francis Cox from Clifton, Kansas. I have been a water well driller and pump installer all my life. I am the Executive Director of the Kansas Water Well Association.

In reviewing HB 2944, I didn't see where there was a member on the committee from the water well and pump industry. I feel it would be a great benefit to the success of this committee if there was a member from our industry. We work with trying to protect and improve the groundwater quality in our everyday operations. We are the first people to know of our customer's problems and are committed to solve these problems.

We were members of the Kansas Water Well Advisory Committee. We contributed to many decisions made by the committee and most of all we brought valuable information, discussed at these meetings, to our drillers in an attempt to solve problems and prevent future problems.

I see where this committee, including a representative from the water well industry, can be very beneficial to our groundwater protection. I'm asking of you to include a representative from the water well and pump industry and support HB 2944.

Thank you.

TESTIMONY BY

KSU, EXTENSION WATER QUALITY TASK FORCE, Morgan Powell

Before House Energy and Natural Resources Committee, February 23, 1988
Regarding House Bill 2944

Water quality is a priority issue of the Extension System. Within the last year, water quality was identified as one of 8 National Extension Initiatives. It is also a priority focus within the Kansas Cooperative Extension System. The Water Quality Task Force was organized in late summer 1985. This task force was charged with planning, coordinating and carrying out an educational program on water quality within the Kansas Cooperative Extension Service.

Research sponsored by Kansas Department of Health and Environment with input from Kansas State University Researchers has addressed private farmstead wells. This has been underway for over 2 years as follows:

- * Phase I is complete and evaluated the condition of water quality of 104 randomly selected farmstead wells.
- * Phase II is in the final stages of data analysis for factors about farmsteads and wells which may affect water quality.
- * Phase III is planned as an educational program to deliver the results of phases I and II.

The Water Quality Task Force has planned and begun implementing a water quality educational program. At present, this educational program consists of the following:

- * County extension agent and health specialist staff training.
- * County water quality clinics.
- * Household water quality display and discussions at Farm and Home Shows.
- * Weekly 30-minute radio program on KKSU (began in January).
- * Newspaper question and answer column (will begin in March).
- * Statewide telenet on household water quality is planned for May 10.
- * Over 10 Extension publications on water quality topics and a Household Water Quality Handbook were published in the last year.
- * Water quality program materials were developed for 1800 homemaker clubs.

To help facilitate water quality education, we are working with other agencies and organizations. The task of influencing the 20 percent of Kansas population served by private water supplies will take the combined efforts of all concerned agencies and organizations. Getting people to change their attitude and level of concern so they will test their water supply and take action to improve its safety will take considerable effort.

Household Water Quality Training

An estimated 150,000 private water systems in Kansas serve half a million people, or about 20 percent of the state's population.

PUBLIC water supplies are regulated, tested and monitored by trained staff. Private water systems are not.

TODAY'S newspapers, radio and television regularly carry stories about contaminated water supplies. The problem is real. The public is aware.

EXTENSION and health workers need to be well informed in order to serve as a resource and to answer questions on water safety, contaminants and related topics.

Cost

- There is no registration fee, but a charge will be made for breaks and lunch expenses.
- Handbook for persons not employed in the Extension Service will be \$5.

Morning Program

- 9:00** Welcome—Introduction
Morgan Powell
- 9:15** Condition of Kansas Water
Ray Lamond and Don Cress
*Overview of Status
Contaminants—Origin/Fate/
Decay*
- 9:45** Water and Human Health
Mike Bradshaw
Concerns, Risks, Protection
- 10:30** Break
- 10:45** Water Testing
Morgan Powell
Why—What—Sample Analysis
- 11:30** Safe Water Supplies
Dick Black
*Wells, Springs, Pond, Cistern
Plugging Wells—Bottled Water*

12:15 Lunch

Afternoon Program

- 1:00** Water Nuisances
*Hardness—Iron—Manganese
Laundry—Food—Cleaning*
- 1:45** Home Treatment Equipment
Dick Black and Morgan Powell
*Filters, Deionization, Etc.
Monitoring, Maintenance, Cost*
- 3:00** Break
- 3:15** Discussion/Questions
*Please bring a water sample and
we will do some simple tests for
NO₃, hardness, salts, irons, etc.
Hard or soft, raw and treated.*
- 4:30** Adjourn

Note: Agents be sure to attend the two sessions at Extension Annual Conference for the rest of your Water Quality Training for 1987.

General Session—Wednesday, October 14, 1:30–3 p.m.
Gyula Kovach—Department of Health and Environment
Judy Willingham—Riley County/Manhattan Health Department

Mini Session
Wednesday afternoon and Thursday morning, Cottonwood Room, *How to Develop a Water Quality Program in Your County.*
Don Erickson and Emily King

Instructors

- **Don Cress**—Ph.D., Oklahoma State University, Entomology. For 14 years, Dr. Cress has given direction to pesticide applicator training in Kansas and Michigan. He has 20 years of experience in entomology, pesticides and related environmental concerns.
- **Mike Bradshaw**—Ph.D., Kansas State University, Educational Administration. Dr. Bradshaw has 18 years' experience in community health education and teaching. This has included the impact of water on human health.
- **Ray Lamond**—Ph.D., Kansas State University, Agronomy-Soil Fertility. Dr. Lamond has 15 years' experience in research of nitrogen, phosphorous and other agricultural chemicals. This has involved movement uptake and degradation of chemicals in the environment.
- **Mary Tucker**—M.S., Iowa State University, Home Economics and Rural Adult Education. Since 1969 she has been an extension specialist in Environmental Family Housing including household water and air quality.
- **Morgan Powell**—Ph.D., Utah State University, Agricultural Engineering-Water. Dr. Powell has a broad background in environmental quality, water treatment and wastewater treatment as researcher, consultant, and extension specialist.
- **Richard Black**—Ph.D., University of Illinois, Civil Engineering-Water Resources. Dr. Black has over 30 years' experience in research, teaching and extension related to water. He has chaired the KSU Extension Water Quality Task Force since 1985.

All six instructors are members of the Kansas State University faculty.

Training Schedule

- ✓ Extension Agents
- ✓ Health Services Personnel

(This program qualifies for .51 CEU for Kansas Association of Sanitarians members)

- **Garden City**, September 29
Fairgrounds, 4-H Building
- **Dodge City**, September 30
High Plains Journal
1500 E. Wyatt Earp
(Park east of building)
- **Colby**, October 1
Fairground, 4-H Building
- **Hays**, October 2
Ft. Hays Experiment Station, Auditorium
- **Concordia**, November 3
Courthouse, Meeting Room
- **Salina**, November 4
Carver Center, 315 North Second
- **Wichita**, November 5
4-H Building, Central and Tyler Road
- **Holton**, November 10
Fairgrounds, 4-H Building
- **Erie**, November 12
Courthouse, Meeting Room
- **Emporia**, November 13
Courthouse, Meeting Room,
4th and Commercial



Cooperative Extension Service
Kansas State University
Manhattan, Kansas

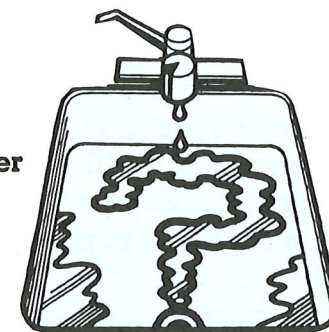
All educational programs and materials are available without discrimination on the basis of race, color, national origin, sex, or handicap.

People want to know

Is our drinking water safe?

How do we find out?

What do we do if it's contaminated?



Household Water Quality

A one-day workshop on water quality to help extension and health services personnel answer the questions Kansans may have

10 locations in Kansas
September 29–November 13



P. O. BOX 175
MEDICINE LODGE, KANSAS 67104



PHONE 316-886-5016

GLENN MOORE

CERTIFIED DEALER

LEROY SEILER

November 19, 1985

To Whom It May Concern:

Approximately the middle of June, 1985 I received a call from Mr. Ivan Bruce of Argonia, Ks. Mr. Bruce asked if I would possibly be able to run a test on the water from his farm well, which is located 4 miles east of Argonia. Upon arrival I drew a sample of water from the kitchen sink and immediately noticed a fowl odor from the water. I proceeded to run tests on this water and found the total dissolved solids in excess of 3,000 ppm (parts per million). I asked Mr. Bruce if there was an oilfield disposal well near by and he advised me that such a well existed 600ft. away, I then asked if the well was pressure injected and his answer was that it had been for 4 years. I then told Mr. Bruce that his water had been contaminated by the disposal water and that his well water was unsuitable for drinking, bathing, and laundry and the cost of cleaning it up was prohibitive. It was at this time he handed me a report from the State Board of Health that he had received a few days ahead of the time that I made the test. This test report indicated that the water was safe for drinking. As usual the only tests that had been made were for E-COLI, Bacteria and Nitrates which are common tests when individual wells are tested and the customer does not understand why the State Board of Health hasn't reported the other contamination. It is imperative that they advise individuals that there are many other contaminations in our water supply and the customer assumes that fact has been taken into consideration. My advise to Mr. Bruce was to contact the State Corporation Commission in Wichita.

Mr. O'Conner made a trip to Argonia and tested the water and said he would need more evidence and wished to know the quality of the water in the surrounding area of the well. I completed that test of which you will find a copy of in the enclosed material. This failed to accomplish anything and I advised Mr. Bruce to continue to talk to the State Corporation Commission and not give up. After additional time had passed I advised Mr. Bruce to contact an attorney.

Mr. Bruce then got a hold of Mr. Kirk Patrick at the State Corporation Commission after more delay Mr. Bruce did receive a new well which was drilled about 400yds. from the old well. This new well was the second of two attempts to find decent water. This was all done at the expense of the oil company, however, nothing was done to retrieve the contaminated well and probably the only way of redeeming that well is to plug the disposal well and not to use it for that purpose anymore. It would then take time for the problem to clear up but it eventually should.

Sincerely,


Glenn H. Moore

Coliform bacteria were not found in the sample portion examined indicating thereby a satisfactory sample.

E. Coliform bacteria were found in the sample portion examined in the number indicated. Steps should be taken to determine the source of pollution and after corrective measures have been taken, an additional sample should be collected and submitted to this laboratory. Please contact your local Health Department for assistance.

M. The excessive amount of bacterial growth found in the sample portion of water examined resulted in inability to identify and count coliform bacteria. After corrective measures have been taken to prevent gross bacterial contamination followed by chlorination, an additional sample should be taken.

J. Coliform bacteria were not found in the swim pool water sample portion examined.

K. Coliform bacteria were found to be present in the swim pool water sample portion in the number indicated. Presence of coliform bacteria in swim pool water is generally due to inadequate chlorination. A chlorine residual of 0.4 to 0.6 milligram per liter should be maintained at all times in swimming pool water.

Note. Public water systems must be prepared to preserve all bacteriological reports for a minimum of five (5) years.

- L. The water sample(s) could not be examined because:
 1. No date of collection of the water sample given.
 2. Excessive time between collection and date of laboratory arrival. Samples are discarded that are in transit longer than 48 hours.
 3. Presence of chlorine in the water sample.
 4. Insufficient water for examination due to sample bottle leaking while in transit.
 5. Laboratory accident.
 6. Sample bottle numbers not given by collector resulting in inability to properly identify sample with sources of collection given on shipment card.
 7. Inadequate information regarding the sample source, collector's name and other essential information.
- TC. The abbreviation indicates the membrane filter count is the total coliform count.
- FC. The abbreviation indicates the membrane filter count is the fecal coliform count.
- FS. The abbreviation indicates the membrane filter count is the fecal Streptococcus count.
- X. No interpretive statement available.

Office of Laboratories and Research
The Environmental Laboratory
Forbes Bldg. 740
Topeka, Ks. 66620

Performed by

THE BACTERIOLOGICAL EXAMINATION

Interpreted by

Kansas Dept. of Health and Environment
Division of Environment
Topeka, Ks. 66620
Phone (913) 862-9360

Collected by **BRIAN BRUCE**

for

ID Number **25U00-SU-2**

(date) **02/12/85** received by laboratory (date) **02/13/85** and reported (date) **02/14/85**

Examination consisted of a search for the presence of coliform bacteria in the water sample. Methods used are those in the latest edition of Standard Methods for the Examination of Water and Wastewater. Coliform bacteria are those indicating bacteria as they are always present in human and animal wastes.

Location where sample(s) were taken	Chlorine residual	Membrane filter count per 100 ml.	Laboratory Number	Count made by	For a brief interpretive Statement, refer to the paragraph indicated by letter(s) appearing in this column.
KITCHEN SINK FAUCET		LT 10	04621		D

TO WILL BE ISSUED FOR KAR 28-15-25 COMPLIANCE DETERMINATIONS FOR THE REPORT PERIOD

BEGINNING **02-04-85**

AND ENDING **03-01-85**

IN THE CASE OF PUBLIC WATER SYSTEM.

Coliform bacteria were not found in the sample portion examined in the number indicated. Steps should be taken to determine the source of pollution. After corrective work has been done, the sampling at this point should be repeated. To look for include inadequate chlorination, recent main repair without adequate disinfection, a cross-

C. The excessive amount of bacterial growth found in the sample portion of water examined resulted in ill-defined colonies that could not be identified and counted with accuracy as coliform bacteria. This result is expected with inadequate chlorination, poor sanitizing after main repair or poor housekeeping practices in the operation of the water supply. After corrective measures have been taken, the sampling at this point should be repeated.

P. O. BOX 175
MEDICINE LODGE, KANSAS 67104



PHONE 316-886-5016

GLENN MOORE

CERTIFIED DEALER

LEROY SEILER

November 19, 1985

Mr. Ralph E. O'Conner
District Geologist
Bureau of Oil Field & Environmental Geology
Wichita, KS 67202

Mr. O'Conner;

Mr. Ivan Bruce of Argonia advised me that you wished reports on water samples surrounding the area of his well. On this date I went to Argonia and report the following information.

Ivan Bruce well-----	Total dissolved solids:	3,000ppm
	Total hardness:	842ppm
	Total chlorides:	2,000ppm
When drawn from the tap, the water has an oil-gas odor.		
Waymire 1/2 mile west of Bruce:		
	Total dissolved solids:	400ppm
	Total hardness:	342ppm
	Total chlorides:	60ppm
3/4 mile due South of disposal well:		
	Total dissolved solids:	185ppm
	Total hardness:	153ppm
	Total chlorides:	48ppm
3/4 mile S.E. of disposal well:		
	Total dissolved solids:	175ppm
	Total hardness:	153ppm
	Total chlorides:	60ppm
3/4 mile N.E. of disposal well:		
	Total dissolved solids:	550ppm
	Total hardness:	427ppm
	Total chlorides:	160ppm
3/4 mile N.W. of disposal well:		
	Total dissolved solids:	250ppm
	Total hardness:	188ppm
	Total chlorides:	45ppm

I am not a licensed lab technician, and I am using color comparison test equipment--with which two different people will come up with a different reading. I do not claim these tests to be completely accurate, however, they are close enough to cause a person to be very concerned about the well on the Bruce farm.

Sincerely,

Glenn H. Moore
Glenn H. Moore

STATEMENT OF THE
KANSAS WATER QUALITY ASSOCIATION
and
WATER QUALITY ASSOCIATION

on

HOUSE BILL 2944

before the
HOUSE ENERGY AND NATURAL RESOURCES COMMITTEE

February 23, 1988

Lucius Cole, P.E.
Technical Director
Water Quality Association
4151 Naperville Road
Lisle, IL 60532
312/369-1600

Good afternoon Mr. Chairman and members of the House Energy and Natural Resources Committee, I am Lucius Cole, Technical Director of the Water Quality Association, Lisle, Illinois. Today, I am speaking on behalf of both the Water Quality Association (WQA) and the Kansas Water Quality Association (KWQA). WQA is the national trade association representing over 2,000 member companies who manufacture, sell, and service water treatment products for residential, commercial, and industrial uses. KWQA represents the members of that industry in our state.

On behalf of WQA and KWQA, I would like to thank the committee for the opportunity to appear before you today, regarding House Bill Number 2944, which would create the Kansas Commission on Private Household Water Quality. Our comments today are directed at the need for such a commission, its responsibilities, and its membership.

At the outset, WQA and KWQA support the creation of the Kansas Commission on Private Household Water Quality. Drinking water contamination throughout our state has become more widespread and serious. Media coverage of drinking water contamination, and an increasing interest in health and fitness among individuals, has heightened consumer awareness about the quality of their water supply. Many consumers are having their water tested to determine if it is safe to drink, particularly those served by private wells, since they are not required to be tested by the state.

Nearly one-fifth of Kansas residents are solely dependent on private wells, and these wells are not regulated by the state. This commission could determine the threat of contamination to these wells and adequately inform the estimated half million Kansas citizens who rely on private wells.

In light of this need, we support the commission's role to study public information and educational programs to advise citizens of potential sources of ground-water contamination and methods of protecting private supplies.

The Cooperative Extension Service at Kansas State University has done a great deal of work in putting together information for consumers on water quality. Their efforts would serve as an excellent starting point to determine what information is out there and what else needs to be done.

The Kansas Department of Health and Environment provides testing for private well owners, at their own expense, for bacteria and nitrates. These two tests are very important to determine if a water supply is safe to drink, since the presence of these contaminants may pose an acute health risk. However, other contaminants may be in the water which were not analyzed, which may pose a chronic or long-term health risk. Therefore, we further support a role for the commission to study the types of tests which should be recommended or required for private household water supply analyses. Additionally, we support the provision to have the commission study the issue of what information should be included in the water testing report to private well owners, including both the type of contaminants tested and that the test was not designed to analyze for other contaminants.

We believe that the nearly half million Kansas residents served by private wells have the right to be fully informed about what contaminants were analyzed, and what this means and does not mean.

Finally, we support the proposed membership makeup of the commission. Additionally, we recommend that a representative from a state certified laboratory

designated by the director of the state's laboratory certification program be included, along with a representative from a lending institution, since they often require a test of a private water supply before approving a loan.

We appreciate the inclusion of a representative from our industry to serve on the commission and would be pleased to do so.

That concludes my presentation. I would be pleased to answer any questions you may have at this time.

Respectfully submitted,

Lucius Cole, P.E.
Water Quality Association
4151 Naperville Road
Lisle, IL 60532
312/369-1600



PUBLIC POLICY STATEMENT

HOUSE ENERGY AND NATURAL RESOURCES COMMITTEE

RE: H.B. 2944 - Legislation To Establish a Kansas Commission
on Private Household Water Quality

February 23, 1988
Topeka, Kansas

Presented by:
Paul E. Fleener, Director
Public Affairs Division
Kansas Farm Bureau

Mr. Chairman and Members of the Committee:

My name is Paul E. Fleener. I am the Director of Public Affairs Division for Kansas Farm Bureau. We welcome the opportunity to make very brief comments concerning H.B. 2944. This legislation proposes something which should be supported by everyone in the state ... a mechanism for public education and information on steps that can be taken to protect private household water supplies from potential sources of contamination.

Farmers and ranchers in Kansas have taken strong stands on water policy for the State of Kansas. We will not in this brief testimony detail for you all of the policies we have on water policy, water quality, water conservation. We would tell you that our people believe the Kansas Water Authority "should be the agency for water management in Kansas." Our members have also said they believe the Water Authority "should be responsible for coordinating development and approval of all changes proposed for the state water plan."

There is certainly a need for standards to protect and maintain the quality of our surface

urge the Legislature to make adequate funds available to assure that the agencies responsible for maintenance of water quality are enforcing existing statutes.

Mr. Chairman, and Members of the Committee, our organization feels so strongly about an educational effort for those who have a well for domestic water supply and the maintenance of the quality of the water from that source of supply that just a week ago our Board approved a plan and a program which we will be implementing from this day forward. The program starts with a "Self-Help" Checklist for possible contaminants and for pollution control measures that may be needed.

It would be our suggestion that perhaps this legislation, or the thrust of what is proposed in H.B. 2944, be directed to the Kansas Water Authority and the Basin Advisory Committees to develop specific programs and to cooperate with organizations such as ours, such as the Cooperative Extension Service, the Department of Health and Environment and others who are today working on educational, informational efforts to protect water quality from contamination.

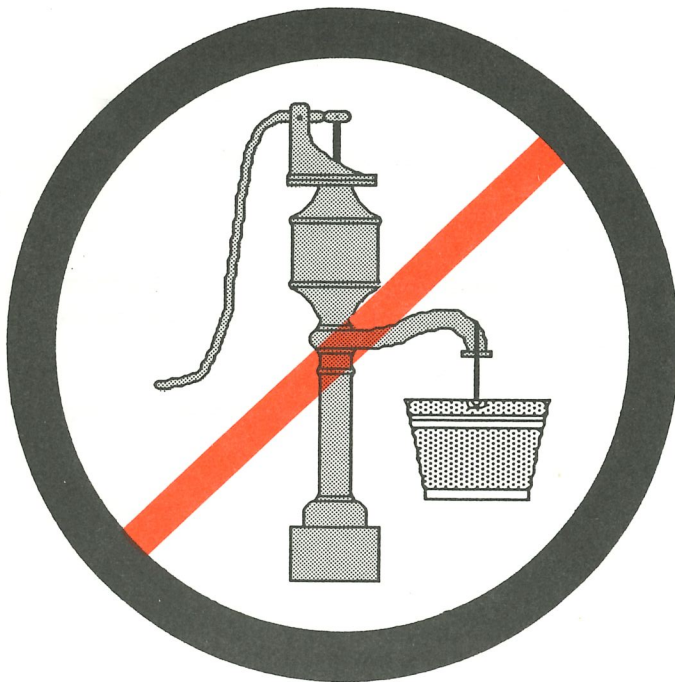
Thank you for the opportunity to make these brief statements concerning H.B. 2944.

Farm Bureau's
Groundwater & Environmental Pollution

Self-Help Checklist
for Farmsteads and Farm Fields

Purpose: This thought-provoking checklist will help you analyze your own water supply and farming operations.

- ✓ Fill out this Checklist
- ✓ Review it once a year, and
- ✓ Act voluntarily to reduce or prevent pollution from your farming activities.



**IS
YOUR
DRINKING
WATER
SAFE?**

I. BACKGROUND INFO ON YOUR WATER SUPPLY & TESTING, CLIMATE AND SOILS:

Which system provides drinking water for your family and/or livestock?

- ___ **PUBLIC** (EPA defines it as any system with 15 or more connections or serving 25 or more people, including most rural water districts.) Water testing and treatment required by federal Safe Drinking Water Act.
- ___ **PRIVATE** (includes your own system; bottled water; and systems with 14 or fewer connections or systems serving 24 or less people). Water tests generally not required except for dairies and for new wells.

Check the source/s from which your system draws its water:

GROUNDWATER

- ___ Shallow well, 0 to 50 ft.
 ___ Medium well, 50 to 150 ft.
 ___ Well deeper than 150 ft.
 ___ Artesian well
 ___ Spring
 ___ Don't know, but I intend to find out.

SURFACE WATER

- ___ Stream
 ___ River
 ___ Farm pond
 ___ Lake
 ___ Cistern

Is your water treated to kill bacteria? ___ Yes ___ No

If you have a well, is it dug, drilled, or sandpoint? _____

In what year was your well constructed? _____

Is your well properly grouted to prevent contamination from rainfall and animal contamination from seeping down along the well's casing? ___ Yes ___ No ___ Don't Know

Does your well's casing extend above ground level? (It should.)

___ Yes ___ No

WATER TESTING

Have you had your water tested within the last year?

Yes No

If No, what year did you last test it? _____

Did the test include any of the following? Check those that apply.

<input type="checkbox"/> pH	Done by many state health
<input type="checkbox"/> Nitrate	labs for a small fee.
<input type="checkbox"/> Total Coliform Bacteria	Should be done annually
<input type="checkbox"/> Total Dissolved Solids	even if no obvious problems
	exist.

Pesticide Scan

Heavy Metals (lead, arsenic, etc.)

Purgable Organic Carbons (fuels, dry cleaning solvents, etc.)

CLIMATE and SOILS

What is the average rainfall for your area? _____ inches.

(Leaching potential increases as annual rainfall increases.)

Is the bedrock limestone? (Karst Topography) Yes No

Are your topsoils shallow to bedrock (less than 3 ft.)

Yes No

(Thicker top soils may still be a problem depending on soil type.)

Are your soils generally:

Sandy (most likely to allow leaching into groundwater)

Loams (medium leaching potential)

Clays (least likely to allow leaching)

High organic matter (peat or muck)

Loam or some combination of those listed above?

How are any ponds or impoundments on your farm recharged?

rainfall/runoff stream

groundwater/spring pumped well

II. CHECK YOUR FARM'S POTENTIAL TO POLLUTE GROUNDWATER AND YOUR DRINKING WATER SUPPLY

DO YOU:	YES*	NO
<ul style="list-style-type: none"> • Have limestone bedrock fairly close to the surface? <i>(Cracks and sinkholes provide fast movement of runoff and pollutants to groundwater and wells many miles away.)</i> 	___	___
<ul style="list-style-type: none"> • Have sandy soils? <i>(Fertilizers and chemicals can move rapidly to groundwater.)</i> 	___	___
<ul style="list-style-type: none"> • Have water tables within 30 ft. of the surface? 	___	___
<ul style="list-style-type: none"> • Have a dug or sandpoint well less than 50 ft. deep? <i>(These are generally old, not properly cased or grouted. Easily contaminated by bacteria, rodents and surface runoff.)</i> 	___	___
<ul style="list-style-type: none"> • Have a well pit, uncapped well or abandoned well? <i>(Easily contaminated by surface runoff, flooding and rodents.)</i> 	___	___
<ul style="list-style-type: none"> • Have an older submersible well pump? <i>(Many older pumps contain lubricating oil with highly toxic PCBs which could contaminate your water supply system.)</i> 	___	___
<ul style="list-style-type: none"> • Have lead water pipes or lead-soldered pipe joints? <i>(Lead is highly poisonous and could leach into drinking water, especially if the water is acidic.)</i> 	___	___
<ul style="list-style-type: none"> • Use your well for both livestock & household use? <i>(Potential for cross contamination exists.)</i> 	___	___
<ul style="list-style-type: none"> • Have livestock/poultry within 200 ft. of a well? <i>(Bacteria, nitrates and disease may reach the well water.)</i> 	___	___
<ul style="list-style-type: none"> • Have a feedlot, manure lagoon or holding facility? 	___	___
<ul style="list-style-type: none"> • Have a septic tank/field within 75 ft. of a well (double the distance in sandy soil)? <i>(Bacteria and nitrate contamination is possible.)</i> 	___	___
<ul style="list-style-type: none"> • Have a surface water drainage well? <i>(Runoff moves chemicals & manure directly into groundwater.)</i> 	___	___
<ul style="list-style-type: none"> • Have a farm dump? <i>(Improperly disposed house & farm chemicals and animals.)</i> 	___	___

DO YOU:

- Have an underground fuel tank? _____
(Average life of steel tanks is 40 years or less.)
- Put chemicals or fertilizers into your irrigation system? _____
(Without proper checkvalves and equipment the potential for backflows into the well exists if the system malfunctions.)
- Use chemicals from EPA's Priority Leachers List (see list below)? _____
(If you do use them, try to find a substitute chemical which is equally effective but less likely to leach to groundwater.)
- Apply sewage sludge? _____
(Possible problems with heavy metal buildup, disease and nitrates if not monitored carefully.)
- Dump or spread used oil to control road dust? _____
(EPA considers this hazardous waste, better recycle it.)

IF YOU CHECKED "YES" FOR ONE OR MORE OF THE QUESTIONS ON PAGE 3 AND 4 YOU SHOULD DEFINITELY BEGIN A PROGRAM OF ANNUAL WELL WATER TESTING!

*Also, if you checked the "YES" column you should try to reduce your system's pollution potential and/or reduce your production costs.

EPA PRIORITY LEACHERS *(Current as of October 21, 1987 but could change)*

acifluorfen	gamma-chlordane	disulfoton	metribuzin DA
alachlor	chlorothalonil	disulfoton sulfone	metribuzin DADK
aldicarb	cyanazine	diuron	metribuzin DK
aldicarb sulfone	cycloate	endrin	nitrates
aldicarb sulfoxide	2,4-D	ethylene dibromide	oxamyl
ametryn	dalapon	ETU	pentachlorophenol
atrazine	dibromochloropropane	fenamiphos sulfone	pichloram
atrazine, dealkylated	DCPA	fenamiphos sulfoxide	pronamide metabolite,
baygon	DCPA acid metabolites	fluormeturon	RH 24,580
bromacil	diazinon	heptachlor	propachlor
butylate	dicamba	heptachlor epoxide	propazine
carbaryl	5-hydroxy dicamba	hexachlorobenzene	propham
carbofuran	3,5-dichlorobenzoic acid	hexazinone	simazine
carbofuran-30H	1,2-dichloropropane	methomyl	2,4,5-T
carboxin	dieldrin	methoxychlor	2,4,5-TP
carboxin sulfoxide	diphenamid	methyl paraoxon	tebuthiuron
chloramben	dinoseb	metolachlor	terbacil
alpha-chlordane		metribuzin	trifluralin

III. OFF- E ASSESSMENT

(i.e., are other people's actions affecting your water supply?)

What is the approximate distance to the nearest neighbor's well?
(Express in feet or miles) _____.

Is that well: ____ shallow (less than 50 feet); ____ deeper than 50 ft.?

From a map or by observation, in what direction does the groundwater flow through your property? From the _____

_____ to the _____. (Check with local Soil Conservation Service or State Geological Survey if you don't know the answer.) Often times groundwater moves toward the nearest creek or river.

Place a check mark ✓ next to all **POLLUTANT SOURCES** within a 1-mile radius of your property where the groundwater seems to be coming from. (If your farm's water supply is surface water you may have to think in terms of many miles upstream.)

Pollutant Source	Potential Pollution or Problem	If You Suspect/ observe these Problems, Request These Tests
___ Ag Areas	All problems listed in Part II	TC, NO ₃ , pH, TDS, Pesticide Scan.
___ Wetlands	Polluted recharge water.	Bacteria, NO ₃ .
___ Forests	Pesticide use.	Pesticide scan.
___ Highways	Road salt, lead petroleum.	TDS, chlorides, sodium.
___ Housing	Septic, house and lawn chemicals.	NO ₃ , surfactants, Fecal Coliform & Streptococcus.
___ Fuel Tank	Gasoline, diesel.	Hydrocarbon scan.
___ City	Street runoff, fuels.	TDS, pH, Hydrocarbon scan.

(Continued)

Pollutant Source	Potential Pollution or Problem	If You Suspect/ observe these Problems, Request These Tests
___ Industry	Metals, fuels, solvents, acids.	TDS, pH, Hydrocarbon scan.
___ Food Ind.	Rinse water, cleaning solvents.	Bacteria, TDS, pH, Surfactants.
___ Injection Well	Brine, chemicals, & acids.	TDS, pH, acidity, Hydrocarbon Scan, Corrosion Index.
___ Mining	Acid, salts, minerals.	TDS, Fe, SO ₄ , pH, Mn, Al, acidity Corrosion Index.
___ Oil & Gas	Brine, sulfur & minerals	TDS, Na, Cl, Ba, Pb, pH, Strontium, Corrosion Index.
___ Golf Club	Pesticide and Fertilizer use.	NO ₃ , pH, Pesticide Scan.
___ Landfills	Chemicals of all sorts.	TDS, pH, COD, Volatile organics.
___ Sludge	Heavy metals, bacteria.	Bacteria, nitrate, metals.
___ Utilities	Seepage from storage ponds.	TDS, pH
___ Other		

TDS = Total Dissolved Solids, TC = Total Coliform Bacteria, NO₃ = Nitrates, Al = Aluminum, Fe = Iron, Cl = Chlorides, Mn = Manganese, Ba = Barium, SO₄ = Sulfates, COD = Chemical Oxygen Demand, Pb = Lead, Na = Sodium.

If there is any question in your mind about how any of the pollutant sources you checked above may be affecting your water supply then you should have your water tested. This gives you a baseline against which to compare water test results in future years.

Work closely with local government to deal with off-farm problems.

IV. FERTILIZER CHECKLIST

DO YOU:	Yes	No	Can Improve* Investigate	Does Not Apply
<ul style="list-style-type: none"> • Soil test every year, including 2 to 3 feet deep? <p><i>(Deep testing is important in drier climates to determine how much of last year's nitrogen fertilizer remains within the plant's reach.)</i></p>	_____	_____	_____	_____
<ul style="list-style-type: none"> • Have a nutrient "BUDGET" for your cropland? 	_____	_____	_____	_____
<ul style="list-style-type: none"> • Split nitrogen applications by plant growth stages? 	_____	_____	_____	_____
<ul style="list-style-type: none"> • Give fertilizer credits to manure or sewage sludge? 	_____	_____	_____	_____
<ul style="list-style-type: none"> • Give nitrogen credits for previous crops such as alfalfa, soybeans, clover, vetch and other legumes? 	_____	_____	_____	_____
<ul style="list-style-type: none"> • Band fertilizers where possible? <p><i>(Band- ing reduces the amount of rainfall that contacts the fertilizer as the rainfall percolates down through the soil. Band- ing also reduces the chances of weeds using the fertilizer before your crop does.)</i></p>	_____	_____	_____	_____
<ul style="list-style-type: none"> • Use goggles and rubber gloves around anhydrous ammonia? 	_____	_____	_____	_____
<ul style="list-style-type: none"> • Reduce use of nitrogen fertilizers in the fall? <p><i>(Spring use increases yield and reduces NO₃ leaching.)</i></p>	_____	_____	_____	_____
<ul style="list-style-type: none"> • Use N-inhibitors, such as N-Serve? 	_____	_____	_____	_____
<ul style="list-style-type: none"> • Set "Realistic" yield goals? <p><i>(10 percent higher than the average yield for the last 3 years is reasonable.)</i></p>	_____	_____	_____	_____

**Even if you checked the YES or the NO column you also should check the "Can Improve" if you think there's the slightest chance you could reduce your system's pollution potential and/or your production costs.*

V. STORAGE OF AG CHEMICALS

DO YOU:	Yes	No	Can Improve* Investigate	Does Not Apply
• Know whether your fire department would let a building burn if it contained ag chemicals, rather than risk having their water carry chemicals to groundwater or nearby streams?	___	___	___	___
• Padlock chemical storage areas? ..	___	___	___	___
• Keep duplicate records of amounts and types of chemicals in storage and keep one set someplace else other than your chemical storage building? <i>(The extra record is useful in case of fire.)</i>	___	___	___	___
• Know which chemicals must be stored in a heated area to prevent loss of effectiveness due to freezing?	___	___	___	___
• Have any chemical containers with missing or unreadable labels?	___	___	___	___

VI. HANDLING & APPLICATION OF AG CHEMICALS

DO YOU:

• Know that different parts of your body absorb pesticides at different rates?	___	___	___	___
--	-----	-----	-----	-----

Anatomy	% Parathion Absorption
scalp	32.1
ear canal	46.5
forehead	36.3
forearm	8.6
palm	11.8
abdomen	18.4
scrotum	100.0
ball of foot	13.5

(Researchers in California measured the percent absorption of parathion by different parts of the anatomy:)
Most other pesticides have not been checked for body absorption rate.

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Not
Apply

DO YOU:

Yes No

- Know that symptoms of low-level organophosphate insecticide poisoning closely mimic the symptoms of exhaustion or flu?
(Symptoms include headaches, loss of appetite, nausea, dizziness, weakness and sweating.)
- Know that a product with higher water solubility, longer persistence, and low soil absorption has a greater potential of reaching groundwater?
- Use integrated Pest Management (IPM) to determine whether the \$ loss to the pest is great enough to warrant spraying, rather than spraying by schedule?
- Use one of the five specifically defined types of conservation tillage (reduced till, mulch till, slot till, ridge till, or no-till)?
(They reduce the amount of soil, chemicals & fertilizer that is eroded to surface waters.)
- Band herbicides, insecticides, and other chemicals, rather than broadcasting them, to cut your costs and reduce their potential for pollution?
- Read the label before applying any chemical, and follow it?
- Calibrate spray nozzles before use? .
- Know about electrostatic sprayers?
(Greater % of spray stays on crop.)

**Even if you checked the YES or the No column you also should check the "Can Improve" if you think there's the slightest chance you could reduce your system's pollution potential and/or your production costs.*

DO YOU:	Yes	No	Ca. prove* Inves- tigate	Does Not Apply
<ul style="list-style-type: none"> Mix and load chemicals and fertilizers at least 100 feet away from your well? <i>(The closer you are, the easier it is for spilled chemicals to get into well.)</i> 	_____	_____	_____	_____
<ul style="list-style-type: none"> Use rubber gloves and boots when handling chemicals? <i>Leather absorbs chemicals and keeps it in contact with your skin for days.)</i> 	_____	_____	_____	_____
<ul style="list-style-type: none"> Measure concentrates and dilutions accurately before adding to tank? 	_____	_____	_____	_____
<ul style="list-style-type: none"> Drain the container into the spray tank by holding it in the vertical position for 30 seconds? 	_____	_____	_____	_____
<ul style="list-style-type: none"> Triple rinse containers as soon as they are emptied before the residue dries? 	_____	_____	_____	_____
<ul style="list-style-type: none"> Empty rinsate into your spray tank? 	_____	_____	_____	_____
<ul style="list-style-type: none"> Have an air gap between the water supply hose and the top of your spray tank to prevent back-siphoning? 	_____	_____	_____	_____
<ul style="list-style-type: none"> Have check valve and proper safety equipment on irrigation wells? 	_____	_____	_____	_____
<ul style="list-style-type: none"> Pump tailwater pits often and reuse the water for irrigation to prevent chemical residue from leaching into groundwater? 	_____	_____	_____	_____
<ul style="list-style-type: none"> Use irrigation scheduling? <i>(If soil is at field capacity, excess water and chemicals will likely move down past root zone.)</i> 	_____	_____	_____	_____

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prove*
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tigate
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Apply

DO YOU:

Yes No

- Delay application to prevent wash-off or surface runoff if heavy rain is forecast?
- Drive tractor into wind or at right angles to the wind whenever possible when spraying to prevent drift from getting on you?
- Refrain from draining rinse water from equipment near or into ditches, streams, ponds, lakes or other water sources?
(Rinse waters containing any quantity of certain pesticides are classified as hazardous wastes according to state and federal laws.)
- Wear one of the new types of disposable coveralls when mixing or applying chemicals?
(It's not very expensive and they do a good job of protecting you.)
- Use Extension Service recommendations for washing spray clothes? . .
- Use crop rotation to avoid buildup of pest populations and maintain or improve soil conditions?
- Alternate pest control products and use crop varieties that are pest resistant?
- Have general groundwater pollution liability insurance?
- **KEEP COMPLETE APPLICATION RECORDS?**
i.e. which chemical, how much, application rate, date, time, temperature, wind conditions, which field, and reason for spraying.)

VII. CONTAINER DISPOSAL

DO YOU:	Yes	No	Can Improve* Investigate	Does Not Apply
• Return unopened chemicals for a refund?	_____	_____	_____	_____
• Check the product label for specific container disposal instructions from the manufacturer? . . .	_____	_____	_____	_____
• Triple rinse and puncture metal pesticide containers and recycle or dispose of them in approved landfills?	_____	_____	_____	_____
• Follow local and state laws on disposal of plastic and paper pesticide containers?	_____	_____	_____	_____
• Live in an area that sponsors voluntary container collection programs? <i>(If not, you might want to help start one.)</i>	_____	_____	_____	_____
• Burn plastic, paper, and other combustible materials after each day's use per application site?	_____	_____	_____	_____
• Burn only in daylight hours and have one person responsible to be in attendance for the entire period of the burn?	_____	_____	_____	_____
• Dispose of used motor oil at recycling centers?	_____	_____	_____	_____

**Even if you checked the YES or the NO column you also should check the "Can Improve" if you think there's the slightest chance you could reduce your system's pollution potential and/or your production costs.*

VIII. HOW TO TAKE A WATER SAMPLE

Always contact the lab where you plan to have the water tested, and ask them for sampling methods, containers, and packaging and delivery instructions.

Your method and timing of taking a sample will vary slightly depending on which point in the system you are concerned about:

1. Actual quality of the main source of water, (groundwater, stream, river, or main distribution lines of a public water system). Remove the faucet's aerator, sterilize the faucet opening by flaming and let the water run for 10 minutes before taking the sample.
2. Condition of your water pipes or storage tanks. Remove the aerator from your faucet, sterilize the faucet opening with flame, and take the sample within 3 or 4 seconds after you turn the water on.

TYPE OF SAMPLING CONTAINER. For some tests, water samples can be submitted in a plastic bag or bottle. Other tests require special dark-colored glass bottles. **ASK THE LAB!**

TIMELINESS. Usually, it's best to test the sample as soon as possible. Labs should receive samples within 24 hours (48 hours at the latest).

HANDLING OF SAMPLE CONTAINERS.

- Do not touch the inside of the container or inside of the lid.
- Refrigerate or pack in ice and deliver to lab as quickly as possible if lab so instructs. (Don't throw the sample in the back seat and run all your errands before you stop at the lab.)
- Don't pump gasoline before taking the sample; ethylene dibromide (EDB) in the gasoline will evaporate off your hands into the sample.

For most accurate results, water samples should always be collected by a disinterested third party trained in proper sample collection procedures, and samples should be tested at an Environmental Protection Agency certified laboratory.

IX. RECOMMENDED INDIVIDUAL ACTIONS

1. Even if no obvious water problems exist, household water supplies should be tested **ANNUALLY** by your county or state Health Department for: pH, nitrates, total coliform bacteria, and total dissolved solids.

Testing water for every contaminant is possible, but very expensive and not necessary. It is more important to test on a regular basis for a few indicators of contamination and to maintain a record of water quality. This helps to identify changes in the supply, contamination of the water source or deterioration of the water system. However, if you suspect other contaminants, test for them too.

2. Test livestock and poultry water supplies ANNUALLY for pH, total dissolved solids, sulfate, fluoride, calcium, magnesium, iron, copper, arsenic, cadmium, lead, nitrate, barium, total coliform, fecal coliform bacteria, and total plate count.
3. **Review this Checklist at the end of each calendar year and jot down which potential problem areas you improved on, and which ones you can work on in the coming year.**

Record of Household Water Tests						
Year	Date	pH 6.8 to 7.5*	Nitrates NO ₃ -N 10ppm*	Total Coliform Bacteria 0/100ml*	Total Dissolved Solids 500ppm*	Other
1987						
1988						
1989						
1990						
1991						
1992						
1993						
1994						
1995						
1996						
1997						
1998						
1999						
2000						

ppm = parts per million ml = milliliters
 *ACCEPTABLE LIMITS WITHOUT TREATMENT

X. SUGGESTED LOCAL FARM BUREAU ACTIVITIES

- Help see that as many farmers as possible get to use this checklist at various meetings. At these meetings, always try to bring in a local water quality expert to make a presentation and answer questions.
- As an educational service, set up a booth at a county fair or a farm show or field day and test water samples for nitrates. (Pennsylvania Farmers Association (PFA) tested over 1,000 samples that farmers brought into PFA's booth at Ag Progress Days. Cost was only 20 cents/test.)
- Hold a county-wide Safe Drinking Water Clinic in cooperation with Extension Service, county Health Department, local well driller, and local water conditioning and testing companies. Pennsylvania Extension Service has an excellent model for this activity. (Your state Farm Bureau NER Coordinator can get more information about it from AFBF.)

If you have questions or want more information, call your:

- County Extension Agent
- Soil Conservation Service
- Local Water Testing Lab
- Regional U.S. EPA Office
- State Dept. of Agriculture
- State Health Dept.
- State Environmental Agency

FOR FURTHER READING:

Contact your state or county Farm Bureau office and request the publication: "Protecting our Groundwater, a Grower's Guide".

BACKGROUND: This checklist was developed as a result of a recommendation by the American Farm Bureau Federation's Special Study Committee on Environmental Pollution.

The committee report stated:

Physical conditions affecting the vulnerability of groundwater to agricultural chemical contamination involve depth to the water table, recharge characteristics, aquifer media, soil types, topography, impact of unsaturated zone, and the conductivity of the unsaturated zone. All these discussions pointed to the "site specific" nature of the resource considerations. . . .

Information on farm management practices that will reduce the potential for movement of agricultural chemicals downward into the groundwater is needed at the user level. . . . There is also a need to promote increased understanding of practices that will improve nutrient management and minimize nitrogen losses to the environment.

As part of the effort required to educate farmers on the safe, responsible practices in agricultural chemical use and environmental concerns, there could be made available through states an Environmental Audit Program for self-examination by individual farmers.

The questionnaire/checklist type program would be designed to highlight the basic safe environmental checkpoints on the farm, for example safe storage and handling of agricultural chemicals, mixing and loading locations and techniques.

The Committee recommended that the self-help program be developed by AFBF "for dissemination to State Farm Bureaus for use at the County level by individual farmers."

Natural & Environmental Resources Division
225 Touhy Ave., Park Ridge, IL 60068 • 312-399-5700



American Farm Bureau Federation

February 22, 1988

Honorable Dennis Spaniol
State Capitol
Topeka, KS. 66612

Dear Mr. Spaniol:

I would like to comment on the proposed House Bill 2929 that concerns the incineration of hazardous waste.

I did try to keep my comments as brief as possible. However, incineration is a very complex process, and I have found summarizing the technology and the aspects involved to be a difficult task.

Thank you.

Sincerely,

Donna Hinderliter

Donna Hinderliter
6156 South Pattie
Wichita, Kansas 67216

Let me thank you for the opportunity to submit my comments on the proposed House Bill NO. 2929.

I appreciate the concept of this proposed bill. However, to consider the siting of an incinerator relative to distance from humans or wildlife, proposes the approval of the incineration process as a viable alternative to landfills for hazardous waste disposal.

The 1984 amendments and reauthorization of RCRA called the Hazardous and Solid Waste Act, established a timeline for restricting untreated hazardous waste from land disposal, and by 1990, most wastes will be restricted.

Without adequate research, the federal government is vigorously promoting incineration as the quick-fix solution to the hazardous waste dilemma.

The Office of Technology Assessment reports that only 1% of hazardous waste is currently being burned, with 20% considered suitable for incineration, in spite of the fact that treatment by incineration has not been proven to be a safe 'disposal' method.

I base this conclusion on the following facts, all taken from EPA documents

1. The EPA's own Science Advisory Board reports many serious concerns about the burning of hazardous wastes:

"The existing analytical data for emissions from hazardous waste incinerators have serious limitations. Among the major problems are the limited number of chemicals selected for analysis and the fact that the analytical methodologies have not been validated either for the conditions of the test or for the complex mixtures which exist in incinerator emissions. As a result, there exist no relatively complete or reliable analyses of mass emissions from either land or sea based incinerators on which to base subsequent estimates of the potential for environmental exposures.".....and: "In any case, 99.99% destruction efficiency does not appear to be achieved if compounds other than POCHs (Principal Organic Hazardous Constituent) in the stack gas are considered." Then: "EPA should evaluate the possible long-term consequences to human health of a continuing program of hazardous waste incineration." 1

2. The EPA promised 99.99% (99.9999% for chlorinated dioxins or similar compounds) destruction and removal efficiency (DRE) of the incinerated waste is a superficial figure arrived at during optimum operating conditions, and the true hazardous organic emission rate is grossly understated.

"Testing of incinerators provide only a snapshot of how well the incinerator is operating during the trial burn...(under optimal operating conditions)...however, optimum operation cannot be attained on a continuous basis. If an incinerator could be sampled on a continuous basis, one would probably find that at least 90 percent of the hazardous organic emissions occur in the fraction of time when the incinerator experiences an upset." (Upsets could be unavoidable lowering of temperature or residence time, waste feed overload, etc.) 2

3. There is a serious concern about the safety of incinerator emissions containing Products of Incomplete Combustion (PICs) and heavy metals.

"But, perhaps a more pertinent question is given that PICs do form, what do we do about them--i.e., how do we control them? Little is known about how to answer this question. Data relative to how to control these potentially hazardous air pollutants is severely lacking. A significant amount of research is needed to fill this void." 2

Then: " During the course of this assessment, two areas of concern have become apparent. These are the incineration of waste streams containing carcinogenic heavy metals, and the release of products of incomplete combustion during incineration. Based on limited data, we find that the human health risk from incineration of carcinogenic heavy metals may be significant under certain conditions. The formation and release of PIC during incineration may also pose a significant risk to the public." 3

4. One type of incinerator, the rotary kiln, is popular because it accepts solid as well as liquid forms of wastes. An EPA Engineering Handbook for Hazardous Waste Incineration reads:

"Unlike liquid injection incinerators which have no moving parts, rotary kiln designs incorporate high temperature seals between the stationary end plates and rotating section. These seals are inherently difficult to maintain air-tight, which creates the potential for release of unburned wastes. Rotary kilns burning hazardous wastes are almost always operated at negative pressure to circumvent this problem, however, difficulties can still arise when batches of waste are fed semi-continuously....This phenomenon is known as "puffing", and can pose a major problem if extremely toxic or otherwise hazardous materials are being burned."

The following is from a report on recent research of this serious "puffing" problem.

"The batch introduction of waste-filled drums or containers into rotary kiln incinerators can lead to transient overcharging conditions, which are denoted as "Puffs." Results demonstrate the relative ease with which failure conditions are achieved, even at high excess air values and high kiln temperatures. Chemical analysis indicates that puffs arising from even innocuous surrogate wastes can contain numerous hazardous compounds even though adequate DREs (>99.99%) are achieved. Increasing kiln temperature and rotation speed can adversely affect puff intensity, due to increased devolatilization and liquid evaporation rates." 4

These referenced reports and research documents establish that burning hazardous wastes does contaminate the air we must breathe, thereby involving risks to far more people than water pollution. Worse yet, contaminated scrubber discharge waters have to be disposed of, and the toxic ash generated by incineration still has to be landfilled!

Water can be purchased, but where do we buy clean air?

Chemical compounds do not magically convert into clean air after being emitted and dispersed.

There is conflicting reports on the break down time for dioxin, a known incinerator stack emission. While it was present in large quantities nearly thirty years after it had been dumped at Love Canal where it is shielded from sunlight, by irradiating it with sunlamps, some experimenters have reported dioxin's half-life (the time it takes for half of it to break down) to be only 5.8 days.

If indeed with adequate exposure to sunlight, dioxin did only have a half-life of 5.8 days, how far would the dioxins travel in the atmosphere, when benzene, said to have an atmospheric half-life of less than one day, has been estimated to reach 240 miles with a wind speed of just ten miles an hour.

How far do stable compounds travel, like carbon tetrachloride that has been said to last in the air nearly indefinitely. This stability suggests that accumulative risk factors are involved.

The National Oceanic and Atmospheric Administration issued a report (Cross-Appalachian Tracer Experiment) on releasing a tracer compound, perfluorocarbon, in Ohio and Ontario which was tracked from airplanes and ground samples. This compound was easily found up to 687.5 miles away.

Some scientists theorize that DDT pollution is traveling from Europe, Asia and Mexico, where the chemical is still used, and could explain the source of 'new' DDT contamination in the Great Lakes.

Incinerators are known to emit compounds such as PCBs, hexachlorobenzene and dioxin/furans, that accumulate in body fats. In 1986, Dr. Arnold Schechter, professor of preventive medicine at the State University of New York at Binghamton, announced that nursing infants in the United States could be imbibing dioxin with their milk at levels 1,300 times those considered acceptable by the Center for Disease Control. He is concerned that the low-levels of dioxin and PCBs can already be seen in our population, and he, among other scientists, is pointing to these environmental contaminants as the cause of the increased rate of cancer, immune-system deficiencies, and reproductive disorders.

Hexachlorobenzene (HCB) does not get the attention it deserves.

Over 150 medical doctors, toxicologists, chemists and other researchers from dozens of countries gathered for five days in Lyon, France to discuss just HCB. "For years, the principal use of HCB was to control wheat bunt and other fungi affecting grain. It has been used as a wood preservative, and as a part of the aluminum and rubber making process....Due to the toxic properties of the chemical intentional production or import of HCB has virtually ceased in the U.S. However, there are several other sources of HCB."

"Currently, eight and one half million pounds of HCB wastes are produced annually as a by-product or impurity in the production of pesticides, solvents and other industrial chemicals. Residues of HCB arise from air emissions from the incineration of these waste products and can come from hazardous waste sites. "Animal studies show powerful evidence of HCB causing carcinogenic effects" stated IARC's Dr. J.R.P. Cabral. and..."It's not only cancer we should be afraid of," stated Dr. Jeff Vos of the National Institute of Public Health and Environmental Hygiene in the Netherlands. "Yes it is dramatic. But there is also immune suppression. And there is clearly a link between the immune system and cancer. It is a dangerous compound, and I would say it's more persistent than dioxin." 5

Alarming high levels of HCB, DDT, PCBs and PCP (pentachlorophenol) have been found in semen samples from 132 healthy student volunteers, by Ralph C. Dougherty a professor of chemistry at Florida State University in Tallahassee. The students' most frequent sperm count was 20 million per milliliter (mpm), compared with 60 mpm in a 1974 study and 100 mpm in 1929.

Dr. Dougherty responded to epidemiologists, who called attention to improved sperm counting techniques, by pointing out that this would not explain an 80 percent decline in 50 years.

Testicular cancer was virtually unheard of in men under 50 a century ago. Since then the average age at diagnosis has gradually declined. Today it is one of the most common cancers in men between the ages of 15 and 34.

Spreading pollution to every environmental media is not the answer to groundwater contamination. EPA has been, and remains, far too easy with industry's waste disposal methods.

It is typical EPA policy to shift and scatter hazardous waste from one environmental media to another. Deep injection wells bury the contamination deeper into the earth. Air strippers, passed off to the public as a 'clean up' method, merely transfers the pollution into the air.

There is no such thing as 'disposal' of hazardous waste. Source reduction is the only solution.

"The Greenpeace organization and other groups have been working to promote the concept of source reduction of hazardous waste. With source reduction in a closed loop manufacturing process, toxic materials never leave the factory floor. Byproduct materials are reclaimed and recycled, instead of discharged into the environment."

"Some companies have already implemented source reduction, slashing their waste discharges. Their initial investments are paying off in avoided disposal costs." (Greenpeace)

Incineration encourages volume waste production by providing yet another dirty, quick and easy solution. Prohibiting these easy options will automatically force industries to practice source reduction.

REFERENCES

1. "Report on the Incineration of Liquid Hazardous Wastes by the Environmental Effects, Transport and Fate Committee, Science Advisory Board," U.S. EPA Science Advisory Board, April 1985.
- 2 "Examination of Fundamental Incinerability Indices for Hazardous Waste Destruction," Barry Deillinger, John L. Graham, Douglas L. Hall, and Wayne A. Rubey in "Incineration and Treatment of Hazardous Waste, Proceedings of the Eleventh Annual Research Symposium," EPA/600/9-85/028, September 1985.
3. "Inhalation Pathway Risk Assessment of Hazardous Waste Incineration Facilities," C.C. Travis et al, ORNL/TM-9096, October 1984.
4. "Waste Characterization and the Generation of Transient Puffs in a Rotary Kiln Incinerator Simulator," William P. Linak, "Land Disposal, Remedial Action, Incineration and Treatment of Hazardous Waste, Proceedings of the Thirteenth Annual Research Symposium," EPA/600/9-87/015, July 1987
5. "HCB --A Global Issue," Foundation for Advancements in Science and Education, Vol. 4, No. 2