

Approved: 2-14-96  
Date

MINUTES OF THE SENATE COMMITTEE ON ENERGY & NATURAL RESOURCES.

The meeting was called to order by Chairperson Don Sallee at 8:00 a.m. on February 7, 1996 in Room 254-E- of the Capitol.

All members were present:

Committee staff present: Raney Gilliland, Legislative Research Department  
Dennis Hodgins, Legislative Research Department  
Ardan Ensley, Revisor of Statutes  
Clarene Wilms, Committee Secretary

Conferees appearing before the committee:

Ron Hein, Aptus, Inc.  
Franklin K. Willis, Vice-President, Government and Environmental Affairs, Rollins Environmental Services, Inc.  
William Bider, Director, Bureau of Waste Management, Division of Environment, KDHE  
Tom Radar, Heartland Cement, Independence  
Jim Shea, Ash Grove Cement Company, Chanute  
Horace Compton, Lafarge Corporation, Fredonia  
Edward R. Moses, Kansas Cement Council

Others attending: See attached list

**SB 531 - hazardous waste; concerning hazardous waste management; fees paid by off-site hazardous waste treatment and disposal facilities**

Ron Hein, Aptus, Inc., Rollins Environmental Services, Inc., spoke in support of **SB 531** and told the Committee this bill was an entire section out of the hazardous waste statutes and under current law fees are to be established with the secretary giving consideration to the degree of hazard, quantity of waste, costs of treatment or disposal and estimated future receipts. **SB 531** would request that fees be equal.

Franklin K. Willis, Rollins Environmental Services, appeared before the committee and presented testimony stating that **SB 531** was a bill to equalize taxes and fees on hazardous waste combustors (Attachment 1). Mr. Willis departed from written testimony stating his organization is dealing with a structure of fees and permitting conditions which establish an uneven playing field by imposing more difficult environment standards on their specialized hazardous waste incinerator operation in the state and provides lax standards on the cement kilns that burn hazardous waste. Environmental standards being set by the EPA to establish final permit conditions for Kansas cement companies may continue to apply different and more lax standards for air emissions and may continue to ignore any management standards for the cement kiln dust piles. Mr. Willis stated the Aptus facility is paying more than 60% of the hazardous waste treatment fees in Kansas, even though it is burning only 7% of the waste and asked the Committee to right this imbalance.

Bill Bider, Director, Bureau of Waste Management, KDHE, appeared with a neutral position on **SB 531** stating the bill would remove the differential between hazardous waste treatment fees paid by the single commercial hazardous waste incinerator and the three cement manufacturing facilities which burn hazardous waste as supplemental fuel (Attachment 2). He noted Rollins' testimony dealt with a comprehensive review of the bill and relevant factors while his testimony spoke to issues directly related to the fees, that is the distinction between facilities treating (incinerating) hazardous waste and those burning hazardous waste for energy or materials recovery.

Mr. Bider told the Committee this bill would directly impact the three cement kilns which currently burn hazardous waste as supplemental fuel. However, Aptus is able to burn some wastes that the kilns do not want and are not able to burn. In written testimony he explained how the monies from fees are used. Mr. Bider said the legislature must determine whether differential fees are warranted for cement kilns (or other BIF facilities) and incinerators.

## CONTINUATION SHEET

MINUTES OF THE SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES, ROOM 254-E-Statehouse, at 8:00 a.m. on February 7, 1996.

Mr. Bider stated that over all hazardous waste generation appears to be decreasing through waste minimization and prevention so potential funds are presently at their high point.

Tom Radar, Heartland Cement, Independence, appeared in opposition to **SB 531** stating that in removing the differential of fees the incentive for recycling is also removed. He stated the cement kilns produce a product which is taxed, generating revenue for the state. In recycling they are making an important product for Kansas and utilizing a fuel that would otherwise be wasted.

Jim Shea, Plant Manager, Ash Grove Cement Company, Chanute, spoke in opposition to **SB 531** and presented written comments to the Committee (Attachment 3). Mr. Shea stated half of his annual budget is being directed toward environmental issues. Kansas led the field in taking a proactive position in establishing a fee differential for waste streams used for beneficial recovery. Other states are following this action of using hazardous waste fuels for energy recovery. Without this fuel source, coal, a non-renewable resource would have to be used. Burning waste streams strictly for destruction would cause a net increase in pollutants.

Horace Compton, Lafarge Corporation, Fredonia, presented testimony in opposition to **SB 531** (Attachment 4). Mr. Compton noted the Fredonia Co-Processing facility is the most successful of their 14 cement plants and contributes \$8 Million in annual payroll. Mr. Compton stated he supported the original 1991 concept of revenue generating fees for permit programs in KDHE and which are consistent with RCRA while proposed changes are inconsistent and in the conferee's opinion, a step backward. Lafarge and Rollins handle different waste streams with Rollins handling highly toxic, high hazard, low BTU hazardous wastes and should pay proportionally higher fees as allowed in current legislation.

Edward Moses, Kansas Cement Council, appeared and presented testimony in opposition to **SB 531** (Attachment 5). Included with the attachment is a memorandum from Scott H. Segal, Esq. Bracewell & Patterson, L.L.P. concerning the proposed amendment. Mr. Moses called special attention to the charts and graphs attached to his testimony. He also reminded committee members of the difficulties encountered in 1991 when originally dealing with the issue of hazardous waste and commented that it had not been necessary to revisit the issue until now. Mr. Moses noted that the use of the hazardous waste materials rather than coal has saved several thousand tons of coal per year, reducing sulfur dioxide and carbon dioxide emissions.

The conferee pointed out that by assisting other Kansas industries to remain competitive by recovering energy through treatment of hazardous waste and providing a more economical means of disposal, the people of Kansas benefit economically. Mr. Moses stated the Federal level cement kiln standards are more stringent than that of older commercial incinerators under both the Boiler & Industrial Furnace (BIF) regulations and the Resource Conservation and Recovery Act (RCRA).

In answer to a question concerning reference to differentials in EPA regulations, Mr. Bider stated one difference is dust management. The federal regulations establish by definition that the dust from cement kilns is not a hazardous waste. Mr. Bider stated the one problem identified in testimony is one KDHE is working toward a solution. Emission standards are different, determined in different ways for incinerators versus kilns. Mr. Bider stated all regulations in this area are consistent with federal regulations. Kiln regulation is more flexible, allows them to determine if the ash is hazardous. The Aptus dust, even if it passed a hazardous test, would still have to be managed as hazardous because it is called "listed hazardous waste".

In answer to a member's question, Ron Hammerschmidt, KDHE, stated air quality review has been done on the Chanute sampling sites to see if there has been an increase in metals. The data looked at through 1994 did not indicate any increase. He stated epidemiologists have been looking at cancer clusters in southeast Kansas and did not know the status of that search. The division of Health has been working with a number of health departments around the state.

Mr. Bider stated that new emission rates will be set and over a three year period the cement kilns will be permitted. He also stated that the air emission standards are much tighter for Aptus than for kilns but could not explain why two different standards were used.

The meeting adjourned at 8:58 a.m.

The next meeting is scheduled for February 8, 1996.

SENATE ENERGY & NATURAL RESOURCES  
COMMITTEE GUEST LIST

DATE: February 7, 1996

NAME	REPRESENTING
Bill Janice	BOEING
Ron Hein	Aptus
John Mitchell	KDHE
Ron Hammerschmidt	KDHE
Bill Bidar	KDHE
Cynthia Abbott	Ks. Audubon Council
Tom Swan	Citizens, Mound City
Bill Gaven	KNRC / Sierra
Woody Moses	Kansas Cement Council
Jim Shea	Ash Grove Cement Co.
Kurt Sackelansky	Heartland Cement Company
Tom Rader	Heartland Cement Company
Gary Molehan	Lafarge Corporation
Horace Conyter	Lafarge Corporation
Don K. Miles	
Paul Weidhaas	self
Derenda Mitchell	Governor
Craig Volland	Sierra Club
ED SCHAUB	WESTERN RESOURCES INC.

SENATE ENERGY AND NATURAL RESOURCES COMMITTEE  
TESTIMONY RE: SB 531  
Presented by Franklin K. Willis  
Vice President-Government and Environmental Affairs  
on behalf of  
Rollins Environmental Services, Inc.  
February 7, 1996

Mr. Chairman, Members of the Committee:

I appreciate this opportunity to appear before the Senate Energy and Natural Resources Committee to testify on behalf of SB 531, a bill to equalize taxes and fees on hazardous waste combusters. I am Vice President for Government and Environmental Affairs of Rollins Environmental Services, which last year purchased the Aptus hazardous waste incineration facility in Coffeyville from Westinghouse. Appearing with me is Ron Hein. Ron Hein has represented Aptus here in Topeka for many years.

Rollins has been in the commercial business of incinerating hazardous waste for more than a quarter century. That makes us the most experienced and largest company in the United States specializing in high technology combustion of hazardous waste with major facilities in five states and annual revenues in excess of \$200 million. We believe that our technology for safely destroying and disposing of hazardous waste is among the most sophisticated in the world, and that our operating performance meets the strictest standards established by any government agency. We believe the public demands no less, and if our citizens are to have confidence that procedures for the handling, combustion and final disposal of hazardous waste adequately protect health and the environment, they deserve no less than the highest standards. Later this month, the EPA is expected to announce tough new air emission standards for hazardous waste combusters. We already meet these new standards in most regards, and will meet all of them well before their final effective dates.

Many of you may be surprised to hear that, with this history of experience, Rollins' Aptus facility in Coffeyville only burns 7% of the hazardous waste in Kansas. In fact, the other 93% is burned by three cement companies: Ash Grove in Chanute; LaFarge in Fredonia; and Heartland in Independence. Aptus operates under a permit issued by KDHE, and the terms and conditions of that permit have in large part been established by KDHE after their development in public processes conducted by KDHE. The cement companies operate under regulations issued by the federal EPA which gives them temporary, or "interim" status to engage in the commercial business of incinerating hazardous waste. They do this by introducing hazardous waste into their kilns at the same time as they are making cement. They also are to go through the permitting process (though none has a permit at present); however, in large part the terms and conditions for the permits for the three cement companies will be issued by the EPA.

We firmly believe that the standards and conditions that have been established by the EPA for cement companies to incinerate hazardous waste under "interim" status have

*Senate Energy & Nat'l Resources  
February 7, 1996  
Attachment 1*

departed in very significant respects from the tough standards that have been imposed on Aptus and Rollins' other specialized incinerators throughout the country. Specifically, these standards allow cement companies to emit levels of lead, cadmium, arsenic, chromium, mercury and other toxic and carcinogenic heavy metals at 10, 100, even 1,000 times the levels applicable to Aptus, and vastly above levels that reasonable cost technology could meet. Further, the residues from incineration, referred to as cement kiln dust, blow freely in the wind and are dumped in quarries or giant waste piles with no management standards applied to them, despite the significant presence of toxic heavy metals in the dust which come from the hazardous waste that has been injected into the cement kiln for incineration. By contrast, Aptus' residues, which are not essentially different from the cement kiln dust in metals content, must be collected in bags to prevent any blowing, and they are trucked to Colorado for permanent entombment in a specialized hazardous waste landfill.

These double-standards are not directly before the Committee, but we would urge the Committee to seek to determine from the EPA what the basis is for looser standards for cement companies that burn hazardous waste. We think that any facility that engages in the commercial business of hazardous waste incineration should meet the same, uniform tough standards which have been imposed for the best facilities. But, it appears that the EPA, in establishing final permit conditions for the Kansas cement companies, may continue to apply different, and more lax standards for air emissions--and may continue to ignore any management standards for the cement kiln dust piles. We believe there is a good argument that Kansas would not have dual standards if KDHE had full permitting responsibilities for all hazardous waste facilities in Kansas and not just Aptus. We believe they would insist on uniform standards, because KDHE has already determined what is protective of health and the environment in Aptus' permit. And, we believe it is entirely appropriate that KDHE have the permitting power, rather than the federal EPA, because of course it is ultimately Kansans who will have to live with the consequences of hazardous waste burning in the state.

The clear area where direct Kansas state authority does now exist is with respect to fees and charges. Current law and regulations require that Aptus pay \$10/ton for hazardous waste incinerated at its facility; cement companies pay a fee of 50¢/ton for the same waste incinerated at their facilities. We find that our Aptus facility is paying more than 60% of the hazardous waste treatment fees in Kansas, even though it is burning only 7% of the waste! Such a differential is inequitable, and constitutes an incentive to use lower technology facilities to treat hazardous waste. We would ask the Committee to right this imbalance, and thereby impose a level playing field with respect to fees and charges. We are not asking for special treatment, but fair play. We will carry our part of the burden in bearing the cost for the State of Kansas to manage its hazardous waste program, but all should participate on a proportionate basis.

Nationwide, only 23 or 24 cement kilns burn hazardous waste; 120 cement kilns do not burn hazardous waste. In Southeast Kansas, 3 burn hazardous waste, 1 does not. Therefore, uniform fees and standards for hazardous waste incineration should not impair the ability of the cement kilns to compete in the cement industry.

Kansas today provides a magnet for the nation's hazardous waste. Its fee structure gives an incentive to hazardous waste generators to send their waste to Ash Grove, LaFarge, and Heartland Cement Company, and they enjoy additional low costs because of lax standards applied to cement kiln air emissions and because of non-existent disposal standards for the toxic cement kiln dust residues. Kansas ranks second in the country, Missouri first, in the capacity of cement companies that burn hazardous waste--together 40% of the nation's total. In the fee structure, and in permit conditions to be applied to this activity, Kansas can have uniform strict standards, or Kansas can accept something less than that. For the moment, the lead, arsenic and other toxic metals in hazardous waste that go to Kansas cement kilns remain in Kansas. You can insist on change.

Thank you for the opportunity to testify on SB 531. I would be happy to answer any questions you might have.

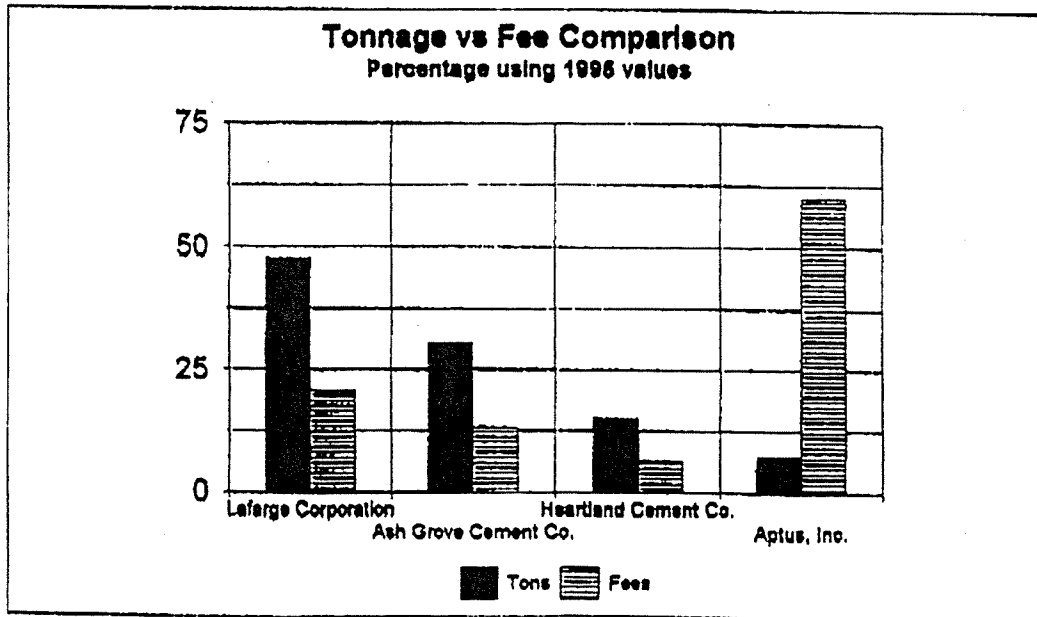
**State of Kansas Off-Site Hazardous Waste Combustion  
Comparison of Quantities and Fees  
CURRENT RATES: \$10.00/ton for Aptus, \$0.50/ton for CK**

**Annual Data Quantity & Fees**

Company	Tons		Fee	
	1994	1995	1994	1995
Lafarge Corporation	62771	60229	\$31,386	\$30,115
Ash Grove Cement Co.	34554	38531	\$17,277	\$19,265
Heartland Cement Co.	13438	18695	\$6,719	\$9,347
Aptus, Inc.	8480	8837	\$84,800	\$88,373
<b>TOTAL</b>	<b>119243</b>	<b>126292</b>	<b>\$140,181</b>	<b>\$147,100</b>

**Annual % of Total Comparison**

Company	Tons		Fee	
	1994	1995	1994	1995
Lafarge Corporation	52.6	47.7	22.4	20.5
Ash Grove Cement Co.	29.0	30.5	12.3	13.1
Heartland Cement Co.	11.3	14.8	4.8	6.4
Aptus, Inc.	7.1	7.0	60.5	60.1
<b>TOTAL</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>



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*Burning Hazardous Waste  
in  
Cement Kilns  
in the  
State of Kansas*

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# **BURNING HAZARDOUS WASTE IN CEMENT KILNS** **IN THE STATE OF KANSAS**

## **SUMMARY**

- 1. Kansas ranks #2 in the nation in capacity of cement companies that burn hazardous waste. (Missouri ranks first) Waste is burned at Ash Grove in Chanute, at Lafarge in Fredonia, and at Heartland in Independence.**
- 2. The burning takes place under lax standards that allow high emissions of toxic heavy metals like lead, cadmium, arsenic, and chromium, as well as other pollutants. These toxic metal emissions are inhaled directly. In addition, they land on the ground where they enter the body through the plant and animal food chain or through contact with soil and inhaling of air-born dust. Total emissions from each of the three Kansas cement companies that burn hazardous waste are many times greater than those from Kansas' specialized hazardous waste incineration facility, Aptus, Inc. in Coffeyville.**
- 3. The nations's first permit for burning hazardous waste by a cement company, which will set the standards to authorize burning for the next 10 years, has been issued to Ash Grove in draft form by EPA Region VII. It will set a precedent for the other Kansas cement companies that burn hazardous waste. While the emissions standards in the draft permit represent an improvement over the current situation, they are still far behind Aptus.'**

- 4. EPA headquarters at Washington, DC is proposing tough new emissions standards for hazardous waste incineration under the Clean Air Act. Aptus intends to adopt them even before their effective date. Cement companies lobbied this summer and fall in Washington for legislation that would prevent the EPA from imposing its new standards, but they have been defeated. They are now lobbying the Clinton Administration to get the EPA to relax its proposals, and if they are not successful they will almost certainly resort to litigation in their efforts to stop the new standards from taking effect.**
- 5. In the meantime, cement companies are accepting higher and higher levels of toxic heavy metal wastes.**
- 6. Heavy metals that do not escape from the stack as emissions in large part end up in the incineration residues, commonly referred to as cement kiln dust (CKD). Almost no standards are applied to the management of this waste, and for the most part it can be openly dumped on the ground, where it blows freely in the wind, constituting a second source in addition to stack emissions where metals can be inhaled or enter the body through the food chain or soil contact. Aptus, in contrast, has permit conditions that prohibit incineration residues from escaping into the environment. Residues are bagged and double-covered with a tarpaulin and then transported to Colorado where they are entombed in a specialized hazardous waste landfill.**

- 7. The risk assessment that was conducted to establish the terms for the draft permit for Ash Grove did not consider the emissions blowing off the giant CKD waste pile at Chanute. Failure to evaluate the health risks posed by these emissions constitutes a direct violation of EPA's guidelines for risk assessments. The draft permit contains no provisions to change the current open dumping practices.**
- 8. Kansas charges a fee of 50¢ per ton of waste burned by a cement company. The fee for Aptus is \$10 per ton. The 50¢ fee ranks among the lowest in the nation for incineration of hazardous waste.**
- 9. With a low fee and lax regulatory standards to protect the environment, compared with other states, it is reasonable to assume that over time increasing amounts of the nation's hazardous waste will be attracted to the cement companies of Kansas. The toxic heavy metals in that waste will become part of Kansas' town and farmland environment.**

**The following pages are offered in support of the statements in this summary.**

## **CEMENT COMPANIES IN KANSAS**

- **Three cement companies burn hazardous waste in Kansas:  
(Table 1)**

**Ash Grove Cement  
Heartland Cement  
LaFarge**

## **KANSAS' CAPACITY**

- **Together the three cement companies constitute about 12-1/2% of the total U.S. capacity for burning hazardous waste in cement kilns. Kansas' capacity is second largest in the U.S.; Missouri ranks first. (Exhibit 1)**

**Table 1**  
**STATE OF KANSAS**  
**CEMENT COMPANIES THAT BURN HAZARDOUS WASTE**

Company	Parent Company	RCRA Legal Status for Hazardous Waste Activities at Site <sup>1</sup>	Kiln Type	Year of Initial Operation	Capacity to Burn Hazardous Waste		Capacity (Clinker) (Tons/Yr)	CKD Generated (Tons/Yr) <sup>2</sup>	CKD Disposal <sup>2</sup>	Fuel Manager
					(Year)	(Tons/Yr)				
<b>Ash Grove Cement Co.</b> P. O. Box 519 Chanute 66720 Ph: 316-431-4500	Ash Grove Cement (U.S.)	Interim Status	Wet Wet	1964 1964	1991	85,000	496,000	97,000	Quarry	Cadence
					1991					
<b>Heartland Cement Co.</b> P. O. Box 428 Independence 67301 Ph: 316-331-0200	RC Cement Co., Inc. (IFI International) (Italy)	Interim Status	Dry	1917, 1986	1994	60,800	332,000	>7,500 <sup>3</sup>	Quarry	RINECO
<b>Lafarge Corp.</b> P. O. Box 479 614 Madison St. Fredonia 66736 Ph: 316-378-4458	Lafarge Coppee (France)	Interim Status	Wet Wet	1921 1956	1994 1994	87,200	374,000	30,000	Landfill	Systemech

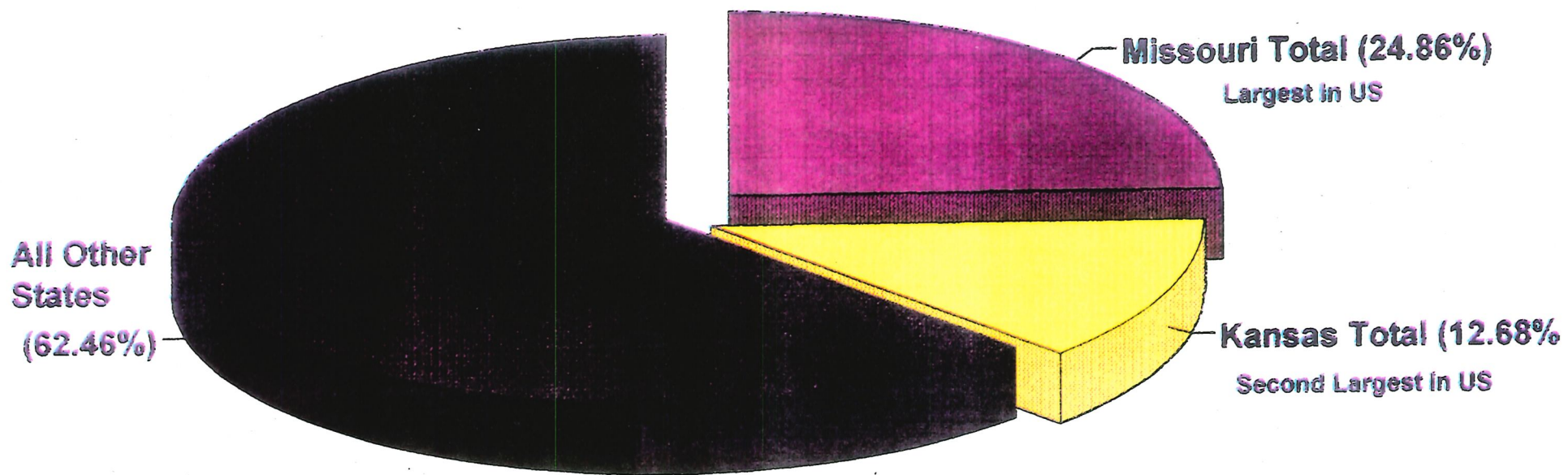
<sup>1</sup> Resource Conservation and Recovery Act.

<sup>2</sup> Cement Kiln Dust.

<sup>3</sup> From EPA Region 7.

**Exhibit 1**

**Hazardous Waste Burned in Cement Kilns  
Capacity - 1994**



**REPRESENTATIVE FEES CHARGED TO ROLLINS ENVIRONMENTAL SERVICES BY OTHER STATES FOR INCINERATION OF HAZARDOUS WASTE**

**New Jersey:** 5% of gross receipts from all charges imposed for the treatment, storage or disposal of hazardous waste at the facility.

**Texas:** \$18/ton for incineration on imported waste.

**Utah:** \$28/ton on hazardous waste disposed, treated or both.

**Louisiana:** \$40/dry weight ton on hazardous waste generated off-site. If waste is received from out-of-state, then fee is higher of \$40/ton or fee charged by state of origin.

**Tennessee:** \$14/ton for off-site treatment or disposal.

**Colorado:** Annual fee assessed to facility at \$6/ton for landfill operations.

**California:** Facilities are charged an annual fee which is not based on volume.

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**Kansas:** \$10/ton for incineration of hazardous waste by Aptus; 50¢/ton for incineration of hazardous waste by cement companies.

## **LAX AIR STANDARDS**

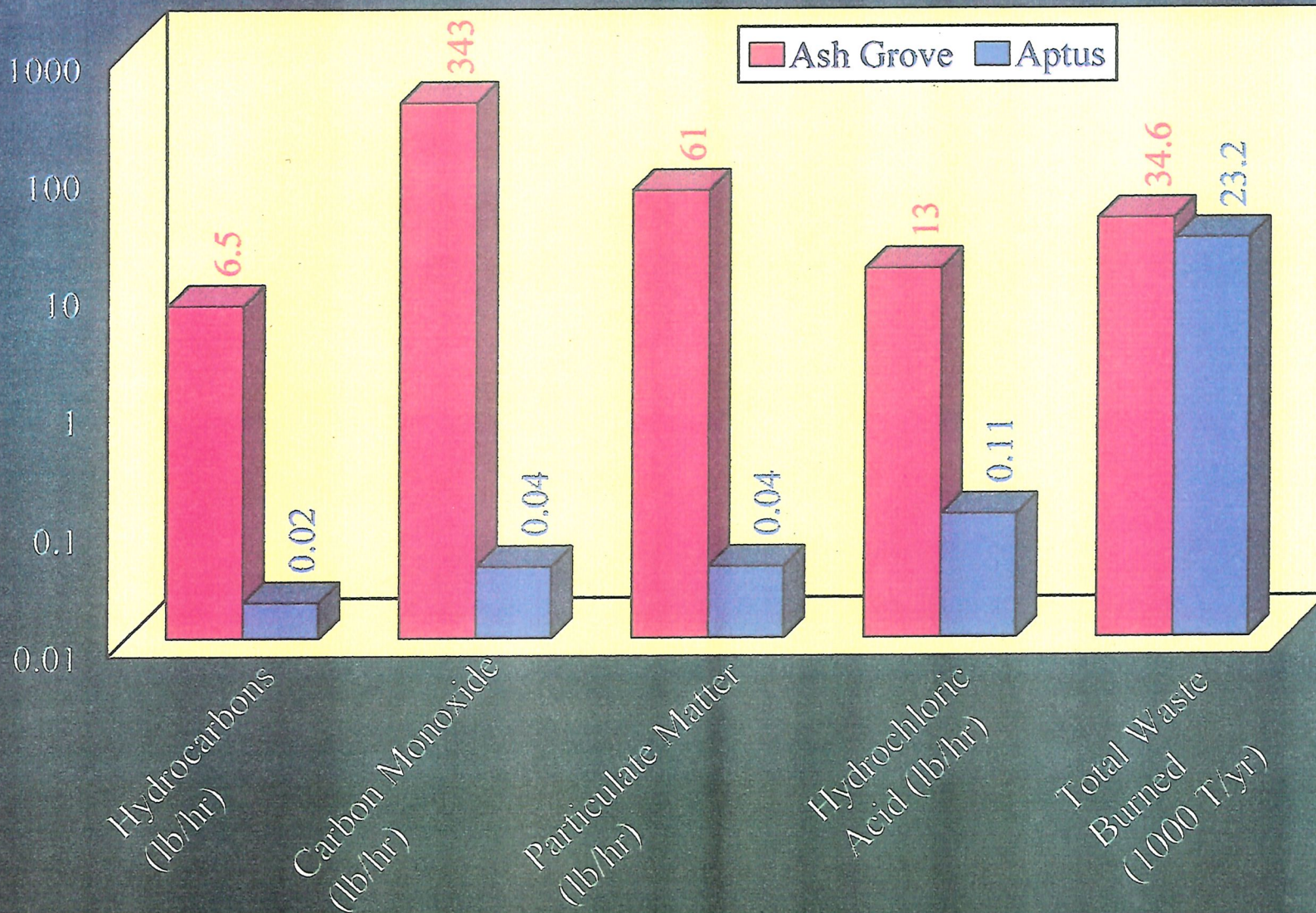
- **The standards for air emissions applicable to Kansas' cement companies are lax. Kansas' cement companies are permitted to emit at levels far greater than the protective standards established for a hazardous waste incinerator, as comparisons of the Ash Grove Cement Company in Chanute with the Aptus facility in Coffeyville will show. (Charts 1-5)**
- **In addition, emissions proposed by the EPA in the draft final permit for Ash Grove, while stricter than the current standards, still are not as protective as the limits applicable to Aptus. (Chart 6)**
- **Nor are the proposed Ash Grove limits as protective as EPA's proposed limits for cement kilns under the new Clean Air Act standards ("MACT" standards). (Chart 7)**
- **The three Kansas cement companies are located upwind of major agricultural farming regions and cattle rangeland.**



Chart 1

# Comparison of Mass Emissions

Ash Grove Cement, Chanute, KS vs. Aptus, Coffeyville, KS

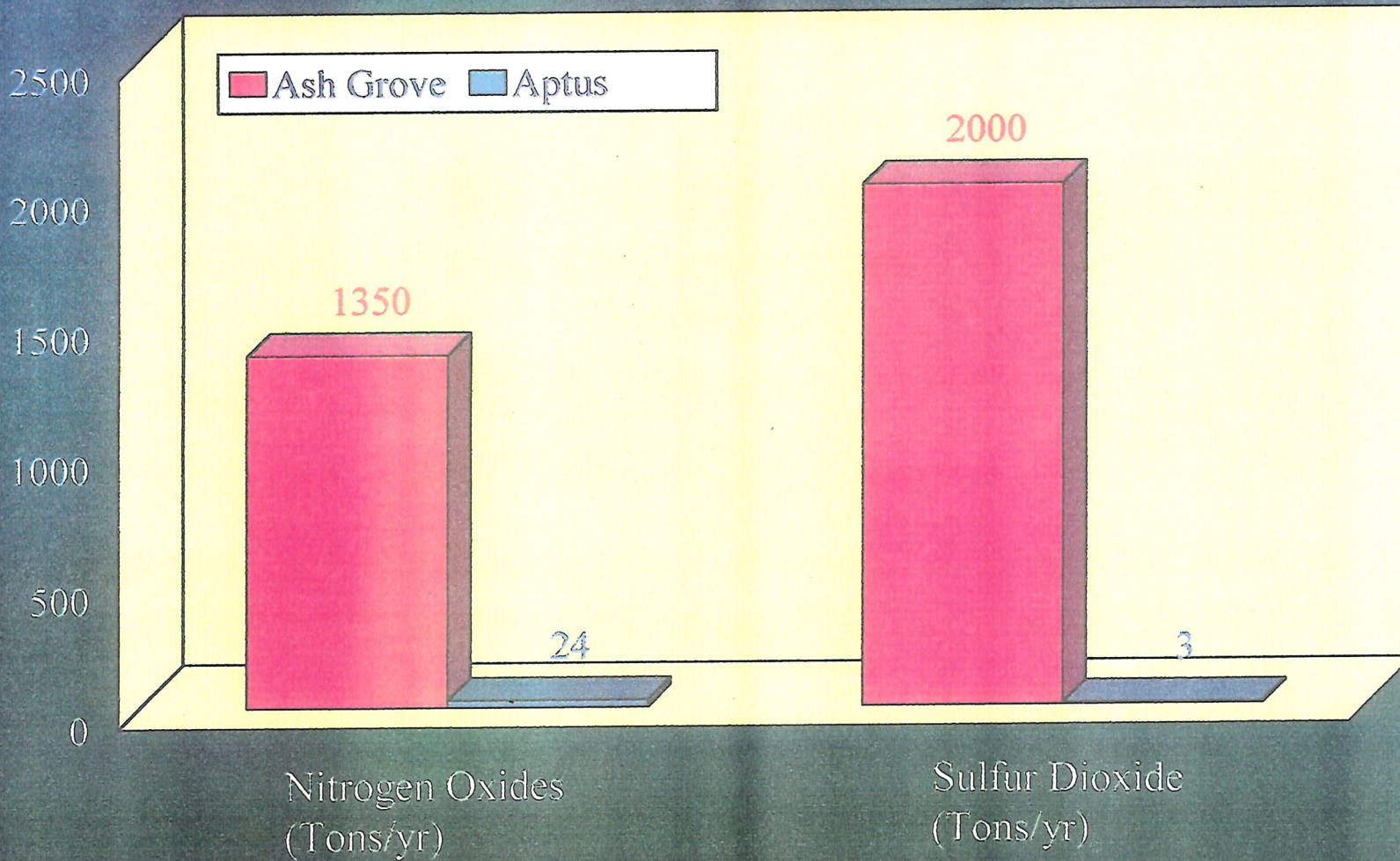


Data from 1994 Trial Burn Reports

Chart 2

# Comparison of Mass Emissions

Ash Grove Cement, Chanute, KS vs. Aptus, Coffeyville, KS

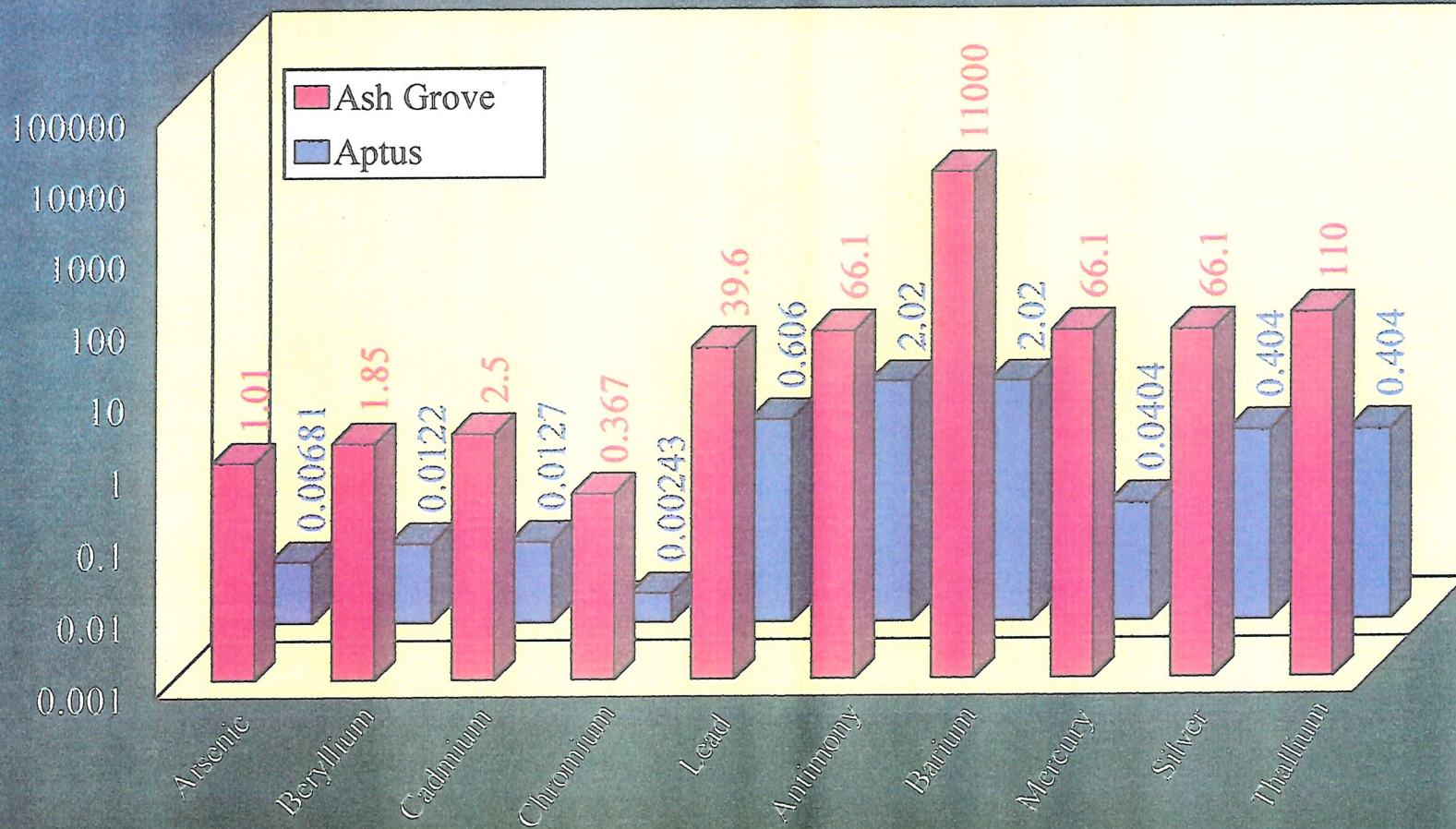


Data from 1994 Trial Burn Reports

Chart 3

# Permitted Metals Emissions (lb/hr)

Ash Grove Cement, Chanute, KS vs. Aptus, Coffeyville, KS

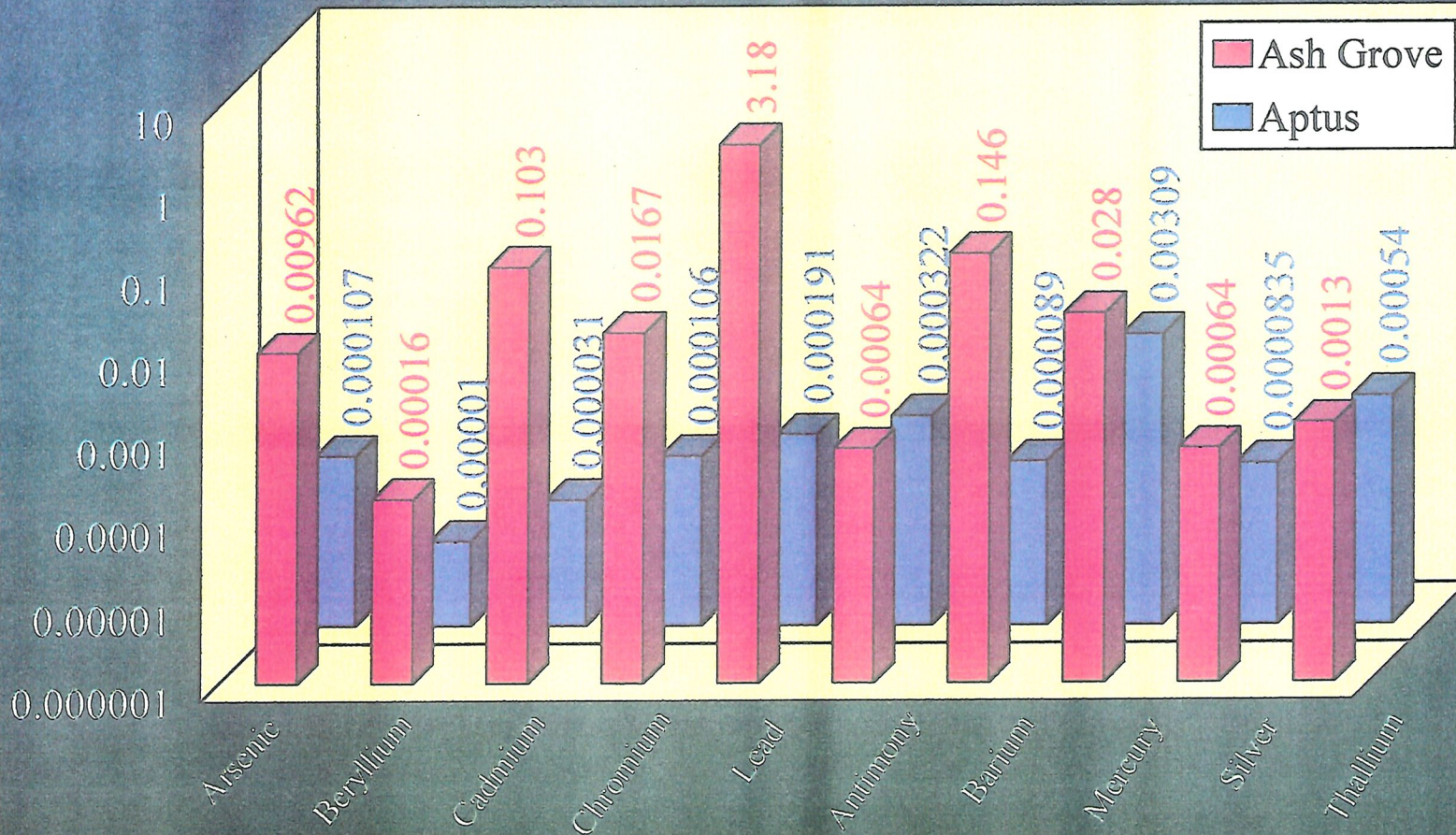


Ash Grove "Final Report, RCRA Trial Burn Report for Kiln Nos. 1 and 2, Vol 1", p.3-12, July 15, 1994, Aptus limits from currently effective permit.

Chart 4

# Actual Metals Emissions (lb/hr)

Ash Grove Cement, Chanute, KS vs. Aptus, Coffeyville, KS



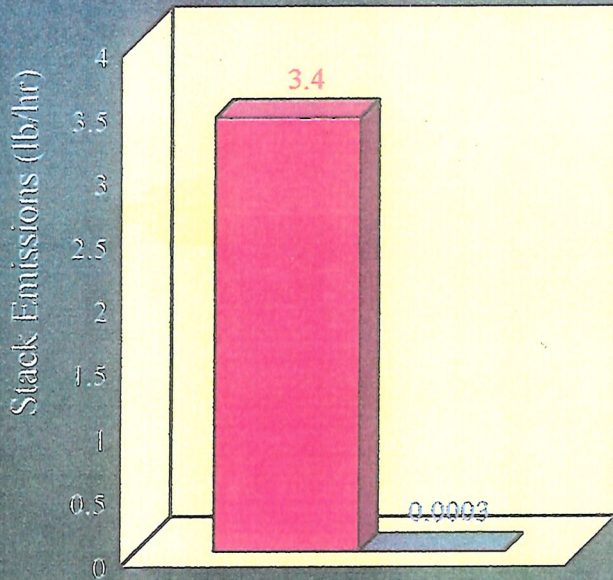
Ash Grove "Final Report, RCRA Trial Burn Report for Kiln Nos. 1 and 2, Vol 1", p.3-12, July 15, 1994, Aptus Stack Test, Table 2-1, 1994.

Chart 5

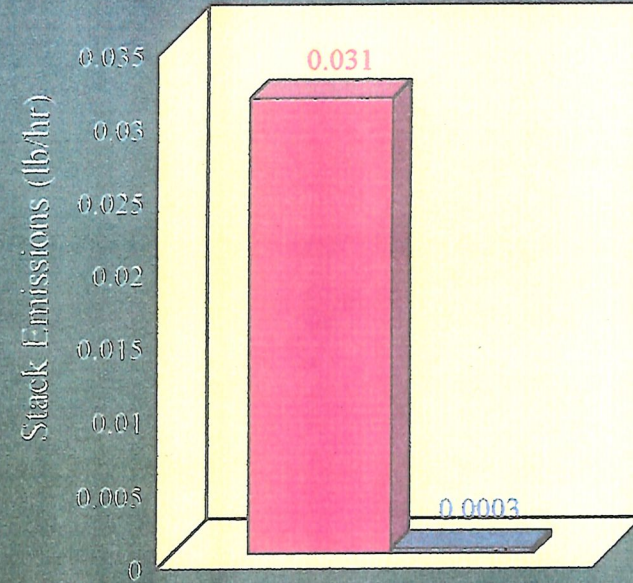
# Comparison of Mass Emissions

Ash Grove Cement, Chanute, KS vs. Aptus, Coffeyville, KS

*Semi Volatile Metals  
(Cadmium & Lead)*



*Low Volatile Metals  
(Arsenic, Beryllium & Chromium)*





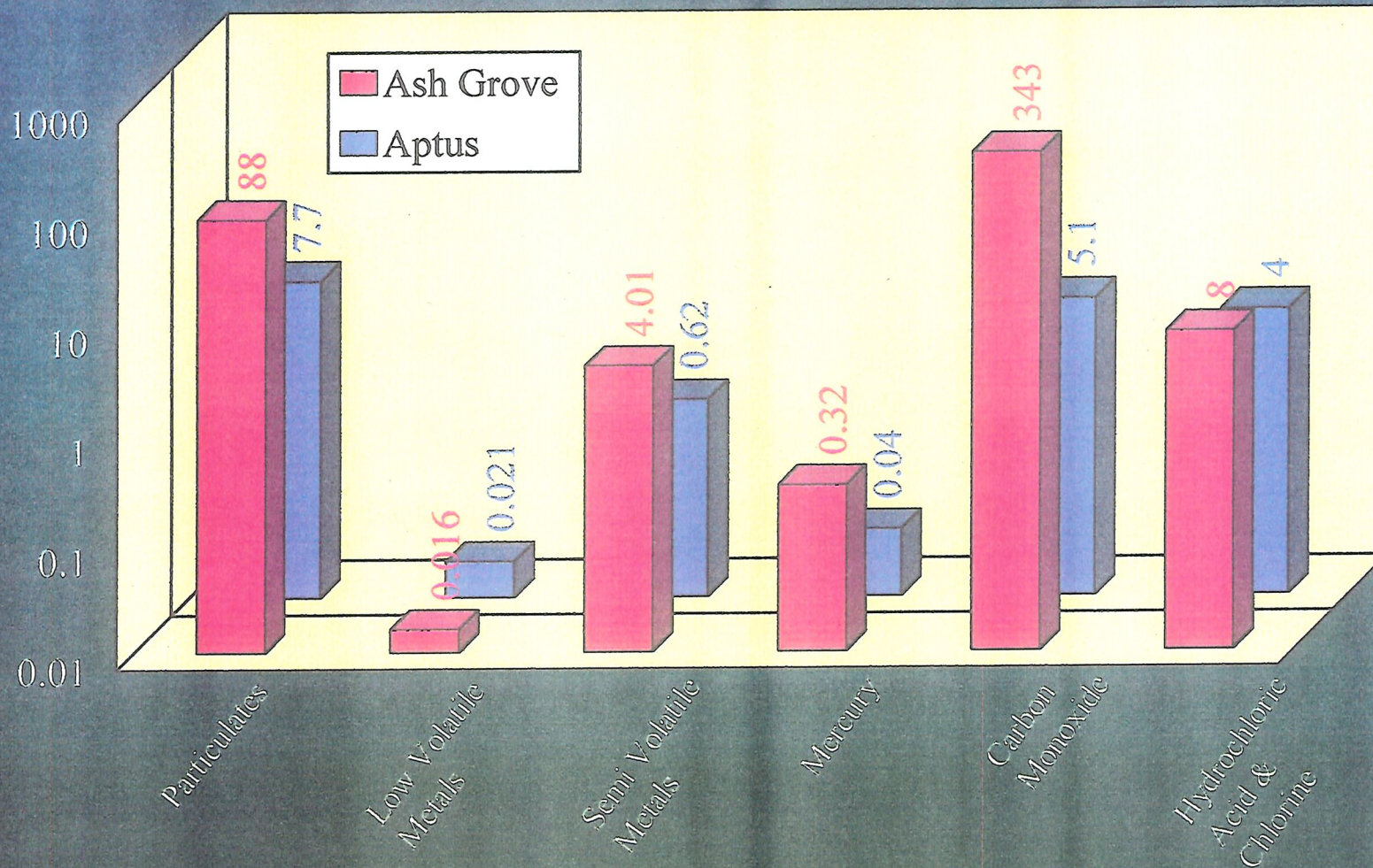
 Ash Grove - 1994 Trial Burn  
 Aptus - 1994 Stack Test

Chart 6

# Comparison of Mass Emissions (lb/hr)

Draft Permit Limits for Ash Grove Cement, Chanute, KS  
vs. Current Limits for Aptus, Coffeyville, KS

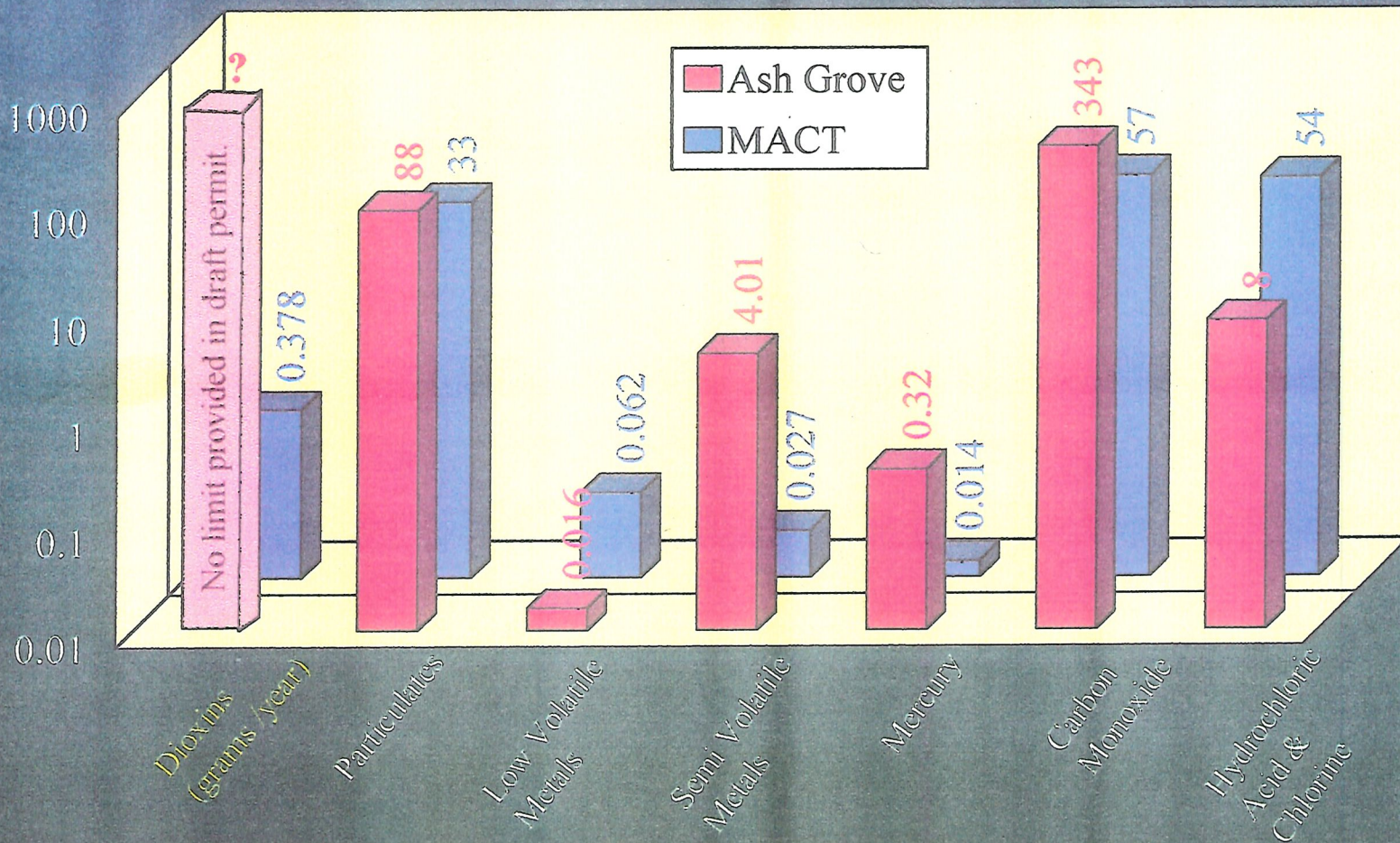


Assumes stack flow of 127,000 dscfm @ 7% O<sub>2</sub> for Ash Grove and 11,300 dscfm @ 7% O<sub>2</sub> for Aptus.

Chart 7

# Comparison of Mass Emissions (lb/hr)

Draft Permit Limits for Ash Grove Cement, Chanute, KS  
vs. Proposed MACT Standards



Assumes stack flow of 127,000 dscfm @ 7% O<sub>2</sub> based on average of stack flows for runs 9-11, 1994 Ash Grove Trial Burn Report. The proposed MACT levels are: 0.2 ng dsem @ 7% O<sub>2</sub> for dioxin; 69 mg dsem for particulate; 130 micrograms dsem for low volatile metals; 57 micrograms/dsem for semi-volatile metals; 30 micrograms/dsem for mercury; 100 ppm for carbon monoxide; and 60 ppm for hydrochloric acid and chlorine.

## HEAVY METALS IN CEMENT KILN DUST

- **Recent research is showing that there is a dramatic build-up of heavy metals concentrations in cement kiln dust as the percentage of hazardous waste burned in a cement kiln increases. Indications are that concentrations will exceed Superfund action levels.**



**Comparison of Metal Concentrations in Cement Kiln Dust Reported by Cement Kilns  
to EPA in 1992/1993 During Compliance Testing Versus  
EPA Data on Metal Concentrations Cited in Report to Congress, December 1993**

Kiln Operator /Location	Metal	Concentrations of Heavy Metals Measured in CKD from Kilns Burning Hazardous Waste Sent to EPA 1992/93	Values of Heavy Metals Reported by EPA in Report to Congress (ppm) December 1993	Ratio of Column 1 to Column 2
Continental Cement Co. Hannibal, MO	Arsenic	97.00 *	NR	
	Beryllium	7.00 *	NR	
	Cadmium	390.00 *	NR	
	Chromium	409.00 *	NR	
	Lead	2,760.00 *	NR	
Heartland Cement Co. Independence, KS	Arsenic	50.00 *	4.67	10.70
	Cadmium	725.00 *	16.00	45.30
	Chromium	900.00 *	30.73	29.30
	Lead	3,000.00 *	123.00	24.40
Holnam, Inc. Artesia, MS	Cadmium	150.00 *	NR	
	Lead	2,000.00 *	NR	
Keystone Cement Co. Bath, PA	Chromium	48.00	28.41	1.70
	Lead	725.00 *	ND	
LaFarge Corp. Alpena, MI	Lead	1,400.00 *	255.00	5.50
LaFarge Corp. Demopolis, AL	Lead	710.00 *	NR	
LaFarge Corp. Fredonia, KS	Lead	3,300.00 *	822.00	4.00
LaFarge Corp. Paulding, OH	Lead	3,451.00 *	777.00	4.40
Lone Star Industries, Inc. Greencastle, IN	Arsenic	50.00 *	3.70	13.50
	Beryllium	8.00 *	ND	
	Cadmium	400.00 *	3.00	133.30
	Chromium	305.00	49.00	6.20
	Lead	2,900.00 *	270.00	10.70
Medusa Cement Co. Wampun, PA	Lead	7,180.00 *	NR	
River Cement Co. Festus, MO	Arsenic	2.00 *	2.20	0.90
	Beryllium	3.00 *	0.36	6.90
	Cadmium	158.00 *	4.20	37.60
	Chromium	26.00	15.40	1.70
	Lead	3,800.00 *	1,200.00	3.20
San Juan Cement Co. San Juan, PR	Cadmium	350.00 *	NR	
	Chromium	150.00	NR	
	Lead	5,000.00 *	NR	

NR = Not Reported, ND = Not Detected

\* = Exceeds Superfund Site Action Levels for These Metals in Soil

## **DISPOSAL OF CEMENT KILN DUST**

- **Nonetheless, cement kiln dust (the ash residue from burning hazardous waste in a cement kiln) from Kansas' cement companies is dumped in the ground and in quarries without protective standards. Ash residues from hazardous waste incinerators, by contrast, are isolated from the environment in high technology landfills subject to rigorous standards. (See photos)**

**The Disposal of Cement Kiln Dust  
Ash Grove Cement Company  
Chanute, Kansas**

Ash Grove  
Chanute, Kansas  
October 23, 1995



Ash Grove  
Chanute, Kansas  
November 6, 1995



Ash Grove  
Chanute, Kansas  
November 6, 1995



Ash Grove  
Chanute, Kansas  
October 23, 1995



**The Disposal of Hazardous Waste Incinerator Residue  
Aptus, Inc.  
Coffeyville, Kansas**



Aptus, Inc.  
Coffeyville, KS  
December 12, 1995  
Dust and Ash Residue Control



Aptus, Inc.  
Coffeyville, KS  
December 12, 1995  
Dust and Ash Residue Control



Aptus, Inc.  
Coffeyville, KS  
December 12, 1995  
Dust and Ash Residue Control



Aptus, Inc.  
Coffeyville, KS  
December 12, 1995  
Dust and Ash Residue Ready for Transport to  
Colorado Hazardous Waste Landfill



## QUANTITIES OF CEMENT KILN DUST GENERATED

- Cement kiln dust generated in 1994 by the three cement companies that burn hazardous waste in Kansas are as follows (in tons):

<b>Ash Grove Cement, Chanute:</b>	<b>97,000</b>
<b>Heartland Cement, Independence:</b>	<b>&gt;7,500</b>
<b>Lafarge:</b>	<b>30,000</b>

## WASTES ACCEPTED FOR BURNING IN CEMENT KILNS

- **Cement companies accept a wide array of hazardous wastes to burn while making cement. Lax emissions standards and non-existent cement kiln dust disposal standards permit them to accept hazardous wastes with high heavy metal content, and burn them at generous feed rates. An example of the high heavy metal content of wastes that may be accepted is Cadence Environmental Energy Inc.'s acceptance specifications, which include lead at 7,200 parts per million and arsenic at 4,500 parts per million. Chlorine wastes may be accepted up to a 6.5% concentration. (Exhibit 2) Cadence is the fuel manager for Ash Grove Cement at Chanute.**

## Exhibit 2

### FOREMAN, ARKANSAS PLANT CHEM-FUEL® S BLEND (CONTAINERIZED SOLIDS) SPECIFICATION ASH GROVE CEMENT COMPANY & CADENCE ENVIRONMENTAL ENERGY INC.

Chem-Fuel® shipments are analyzed and tested on-site. One random container per pallet is core sampled using a mechanical device. The samples are composited, blended, tested and analyzed. Test methods are specified in the receiving facility's Waste Analysis Plan. Material found outside of the specification will require additional management and may include surcharge or return.

<u>PARAMETER</u>	<u>SPECIFICATION</u>	<u>PARAMETER</u>	<u>SPECIFICATION</u>
•Heat of combustion <sup>1</sup>	6,000 Btu/lb. minimum	•pH, extracted <sup>1</sup>	Between 2 to 12.5
•Radioactivity <sup>1</sup>	Background or less	•Stability <sup>1</sup>	Stable
•Sulfur <sup>1</sup>	1% maximum	•Ash <sup>1</sup>	Less than 40% by wt
•Antimony <sup>2</sup>	425 ppm maximum	•Arsenic <sup>2</sup>	4,500 ppm maximum
•Barium <sup>2</sup>	50,000 ppm maximum	•Beryllium <sup>2</sup>	20 ppm maximum
•Cadmium <sup>2</sup>	50 ppm maximum	•Chlorine <sup>1</sup>	6.5% maximum
•Chromium <sup>1</sup>	7,200 ppm maximum	•Lead <sup>1</sup>	7,200 ppm maximum
•Mercury <sup>2</sup>	150 ppm maximum	•Silver <sup>2</sup>	2,000 ppm maximum
•Thallium <sup>2</sup>	200 ppm maximum	•Heavy Metals <sup>1,7</sup>	Less than 0.72% (by weight)
•PCB <sup>1,4</sup>	50 ppm maximum	•Pesticides(Addendum I) <sup>1,4</sup>	50 ppm maximum
•Containers <sup>1,3</sup>	<ul style="list-style-type: none"> <li>• Plant waste fuel manager allowed DOT authorized containers including:</li> <li><u>Rigid:</u> •6 or 7-gallon, 26-gauge, rust-inhibited steel pail w/handle, gasketed lug cover and DOT 37A80</li> <li>•6 or 7-gallon, 90 mil. high-density, polyethylene pail w/handle, gasketed snap-on cover and DOT 35-80</li> <li><u>Flexible:</u> •12x2.5x25 inch 180 lb./sq. inch woven polypropylene fabric outer shell, 20 mil. low-density, polypropylene inner shell, double-lined container w/martin-sewn 4-inch bottom, zipper-tie closure and DOT approved</li> <li><u>Headspace:</u> 1-1/2 inch min.(rigid only)</li> <li><u>Incidental metal:</u> less than 17 gauge/5-ounce pieces totaling under 5 lb. including container (steel containers are 4.5 lb.) <u>no stainless steel</u></li> <li><u>Liquid phase:</u> 1-quart maximum</li> <li><u>Particle size:</u> 2-inch maximum (high-density material only)</li> <li><u>Weight:</u> 80 lbs. maximum</li> </ul>	•Container utilization <sup>3</sup>	<ul style="list-style-type: none"> <li>• Plant waste fuel manager allowed unitization including:</li> <li><u>Rigid:</u> •8-layer minimum, 90-gauge minimum, mechanically stretch-wrapped containers in a 4x3x3 pattern on a 4-way entry, 40 x 48 GMA pallet with 3/4-inch face and bottom boards</li> <li><u>Flexible:</u> •8-layer minimum, 90-gauge minimum, mechanically stretch-wrapped containers in a 4x2x5-6 pattern with all end tails tucked-in on a 4-way, 40x48 GMA pallet with 3/4-inch face and bottom boards</li> </ul>
•Container parameters <sup>3</sup>		•Unacceptable materials <sup>3</sup>	Infectious materials or materials deemed potentially harmful or destructive to the operation.
•Transportation <sup>3</sup>	Closed and sealed box van	•Safety information <sup>3</sup>	See Addendum II
•Waste codes <sup>1</sup>	See Addendum III	•Appearance <sup>3,4</sup>	Orderly with <u>no</u> exterior soiled, disfigured or damaged container.
Nickel	10,000 ppm		
Selenium	100 ppm		

Rationale & Notes: <sup>1</sup> Application/permit; <sup>2</sup> Chlorine & Metal feed rate management; <sup>3</sup> Ash Grove & Cadence management decision; <sup>4</sup> Characteristic peak patterns are treated as positive determination; <sup>5</sup> Aggregate Aroclor 1242, 1248, 1254 & 1260; <sup>6</sup> Shipment to be remediated if problems are found; <sup>7</sup> "Heavy metals" means arsenic, silver, cadmium, lead, chromium, selenium, and mercury.

## **PERMIT CONDITIONS APPLICABLE TO INCINERATOR RESIDUES AT APTUS FACILITY**

- **Residues from the incineration of hazardous wastes must be transferred to appropriate Department of Transportation (DOT) containers, according to 49CFR172.101 and 49CFR173.240 of the DOT regulations. Residues are a hazardous waste (40CFR261) and must be transported under DOT regulations for hazardous waste (40CFR262.30). Impermeable packaging and closed covers are required at all times.**
- **Containers of residues, (usually trailers with end dumps) must be covered and stored in lots on premises, and sent to a RCRA permitted landfill for final disposal.**
- **Residues must be transferred to trailers through a sift-proof channeling system and stored in trailers in sift-proof packaging.**
- **At RCRA landfill (Highway 36, Colorado):**
  - **Loads are uncovered only after they are in the treatment building and the doors are closed. The treatment building is always under negative pressure so no fugitive emissions escape the building when the doors are opened.**
  - **The treatment building has multiple exhaust fans that vent through the baghouse and wet scrubber system to capture fugitive dust.**
  - **All treated wastes (stabilized residues) exiting the treatment building are covered and remain covered until the waste is emptied into secure cells, where all waste materials are kept covered.**

## **PERMIT CONDITIONS APPLICABLE TO INCINERATOR RESIDUE FROM ASH GROVE CEMENT FACILITY**

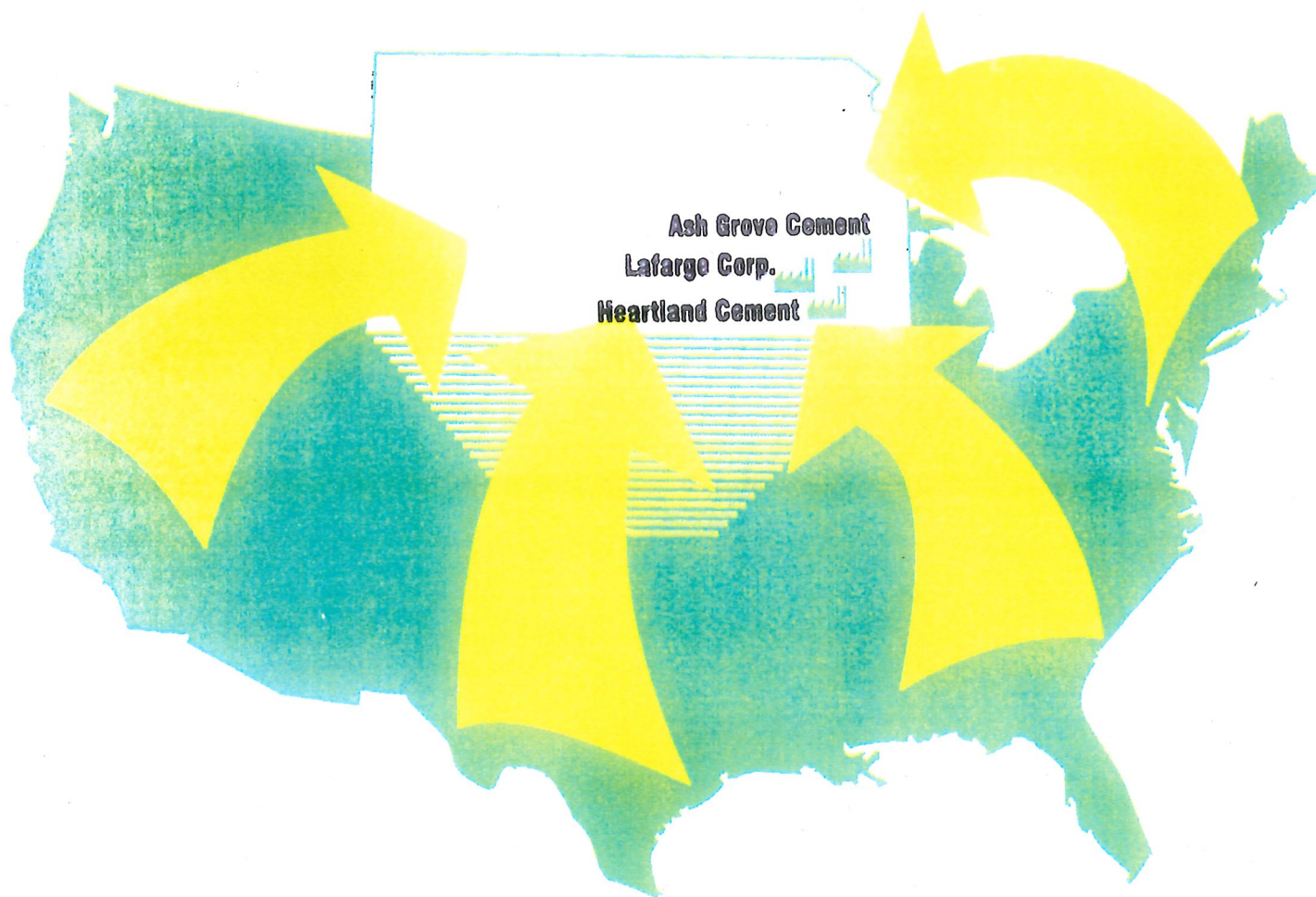
- **NONE**



**In summary, cement companies in Kansas provide the second largest capacity in the U.S. for burning hazardous waste in cement kilns. They burn hazardous waste under lax air emissions standards, and under no standards for disposal of the cement kiln dust produced from the incineration of hazardous waste. Cement kiln dust is dumped freely in quarries and in the ground. Cement companies have been and continue to fight against protective standards to be applied to their hazardous waste activities, and insist that they should not be held to the same high standards that are applied to hazardous waste incinerators.**

**Lax standards and low fees for the burning of hazardous waste can be expected to attract increasing quantities of the nation's hazardous waste to Kansas in the coming years, and the toxic heavy metals in that waste will become part of Kansas' town and farmland environment.**

# Hazardous Waste Combustion in Cement Kilns in the State of Kansas



**Kansas Has 12.7% of the Total  
U.S. Capacity for Burning  
Hazardous Waste in Cement Kilns**

Ash Grove.....	4.6%
Lafarge.....	4.8%
Heartland.....	3.3%

State of Kansas

Bill Graves



Governor

Department of Health and Environment

James J. O'Connell, Secretary

Testimony presented to

Senate Committee on Energy and Natural Resources

by

The Kansas Department of Health and Environment

Senate Bill 531

The Department of Health and Environment appreciates this opportunity to provide testimony on Senate Bill 531. This bill would remove the differential between hazardous waste treatment fees paid by the single commercial hazardous waste incinerator and the three cement manufacturing facilities which burn hazardous waste as supplemental fuel. In the existing statutory language a distinction is made between facilities treating (incinerating) hazardous waste and those burning hazardous waste for energy or materials recovery. The statute established a maximum fee rate of a penny a pound (\$20 per ton) for all facilities but set an annual cap of \$200,000 per treatment facility and \$50,000 per facility burning hazardous waste for energy or materials recovery. In implementing the administrative regulation enabling the department to collect the hazardous waste treatment fees, a fee rate of \$10 per ton (half the allowable maximum) was set for incineration facilities. The fee rate for facilities burning hazardous waste for energy or materials recovery was set at \$.50 per ton (1/40th of the maximum). Under the current proposal, there would be no difference in the fees paid by any of the facilities and the annual cap for all would be \$200,000. The amounts of hazardous waste burned and the fees paid by the four operating facilities in Kansas is provided in the attached table. Many states have imposed fees on hazardous waste management activities in their state and several have treatment fees similar to those in effect in Kansas. In comparison the \$10 per ton rate ranks very low to fees assessed in other states. During fiscal year 1995, the four Kansas facilities burned nearly 120,400 tons of hazardous wastes.

In 1991 when the Kansas legislature established the existing statutory provisions, facilities such as cement kilns, which burn hazardous waste as supplemental fuel, were required by federal and state regulation to limit such fuels to clean materials having a high energy value. KDHE recognized the environmental advantages of burning hazardous waste in place of traditional fuel sources such as coal and natural gas compared to simply burning waste for destruction. In accordance with this preference, the current fee differential (\$10 per ton versus \$.50 per ton) was established.

Prior to 1991, the U.S. EPA considered cement kilns as recycling units and as a result, exempted these facilities from hazardous waste regulation. This position changed on February 21, 1991 when EPA promulgated its Boiler and Industrial Furnace (BIF) regulations. Under BIF the energy content of the waste became less important and in theory, a cement kiln could feed any waste provided the system performed to certain emissions criteria. As a result cement kiln fuel suppliers began to blend low energy content and hard to burn waste materials with higher energy materials. Therefore, the fuels burned by the cement industry now contain the same types of hazardous constituents found in the wastes burned in the incinerators; however, the constituents are generally more concentrated in the wastes which are managed at incinerators. It is noteworthy that many of these concentrated wastes and other hard to burn wastes must be handled by incinerators because the kilns are not designed to burn such materials. Examples of hazardous wastes which cannot be burned in most cement kilns include contaminated soils, paints sludges mixed with metal cans and other inorganics, and various types of contaminated filter media. Incinerators do provide Kansas businesses with an important waste disposal service which is not available through the cement kilns.

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Attachment 2

Today, there is not a clear difference between burning high energy content fuels in cement kilns and in commercial incinerators. Both types of facilities utilize kiln technologies to destroy hazardous wastes and both utilize the heat value of high BTU waste fuels to help burn hazardous wastes with little or no energy content. Although cement kilns can directly substitute high energy waste fuel for fossil fuels, incinerators can minimize their use of fossil fuels to maintain incineration temperatures by burning wastes with high energy contents. Under both scenarios, energy is conserved.

This bill would directly impact the three cement kilns which currently burn hazardous waste as supplemental fuel. If the department applies the existing fee rate for incineration (\$10 per ton) to all four facilities and the quantities of waste burned remains at 1995 levels, two of the three cement kilns would pay fees at the \$200,000 annual cap level while the third would be somewhat less than the cap.

If a uniform treatment fee of \$10 per ton is imposed on all Kansas facilities, total fee revenues will be approximately \$675,000 per year. This is about \$430,000 more than what is currently received under the differential fee structure. These revenues will likely decrease in the future as more waste minimization and pollution prevention programs are implemented by businesses. According to statute, one-quarter of the collected funds is used to support the state's household hazardous waste program. This program has also been supported by \$150,000 per year in state water plan funds.

The remaining 75 percent of fee revenues is currently used to support the pollution prevention program which also receives federal funding. The household hazardous waste (HHW), pollution prevention (P2), and hazardous waste regulatory programs are important to the state and they have generally been successful in achieving their goals. Thousands of persons have participated in the voluntary HHW and P2 programs resulting in less waste generated and less hazardous materials in our landfills. The operation of a state hazardous waste program has minimized federal involvement in compliance and enforcement which has improved the flexibility under which our businesses operate.

In closing, the department would like to emphasize that this bill primarily involves an economic policy decision rather than a technical decision related to the protection of human health and the environment. Based upon the background information provided by the department and other conferees, the legislature must determine whether differential fees are warranted for cement kilns (or other BIF facilities) and incinerators. The department neither supports nor opposes this bill as written.

Thank you for this opportunity to provide comments related to SB 531.

Testimony presented by: Bill Bider  
Director, Bureau of Waste Management  
Division of Environment  
February 7, 1996

**COMPARISON OF HAZARDOUS WASTE TREATMENT FEES  
TO FACILITY CAP PER FISCAL YEAR  
AND TOTAL QUANTITIES OF HAZARDOUS WASTE  
MANAGED BY FACILITY PER FISCAL YEAR**

FACILITY	CAP	FY 1993	FY 1994	FY 1995	FY 1996 (3 QTRS)
APTUS	\$200,000	\$33,842	\$57,832	\$85,397	\$73,119
QUANTITY MANAGED (tons)		3,384.2	5,783.2	8,539.7	7,311.9
ASH GROVE	\$ 50,000	\$18,901	\$15,836	\$17,715	\$15,011
QUANTITY MANAGED (tons)		37,802	31,672	35,430	30,022
HEARTLAND	\$ 50,000	\$ 3,674	\$ 9,245	\$ 7,739	\$ 7,130
QUANTITY MANAGED (tons)		7,348	18,490	15,478	14,260
LAFARGE	\$50,000	\$34,989	\$33,898	\$30,498	\$24,338
QUANTITY MANAGED (tons)		69,978	67,796	60,996	48,676

Source: KDHE 2/6/96

**Comments By Ash Grove Cement Company  
Concerning SB 531  
on February 7, 1996**

- Ash Grove owns and operates a cement plant in Chanute, Kansas which uses "waste derived fuels" in its pyroprocess. The operation employs 158 people and contributes about \$10,000,000 annually to the local economy.

- The State of Kansas was a national leader in establishing a fee structure for the treatment of hazardous wastes which encouraged its use for energy recovery.

Since then numerous other states have or are in the process of following this state's lead.

- The proposed legislation would impose an additional \$150,000 in annual fees to the operation.

- The use of waste derived fuels in lieu of coal or natural gas conserves non-renewable natural resources.

- There should be general concern about air pollution.

Discouraging the use of waste fuels for energy recovery could cause an increase in products of combustion in that industrial furnaces will burn fuel regardless as to whether it is a waste or not.

If the waste streams are burned solely for destruction there should be a net increase in pollutants.

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Attachment 3

LAFARGE CORPORATION  
TESTIMONY BEFORE THE SENATE  
COMMITTEE ON ENERGY & NATURAL RESOURCES

Good morning Mr. Chairman and distinguished members of this Senate.

I am Horace Compton, Plant Manager for the Lafarge Cement & Co-Processing Facility in Fredonia Kansas. I am representing Lafarge while testifying today regarding Senate Bill 531. Lafarge is the second largest supplier of cement in the United States. We operate 14 Cement Plants in the US & Canada. Three are Co-Processing Facilities, the most successful being here in Kansas. The Fredonia Co-Processing Facility includes the Lafarge Cement Plant and Systech fuels handling facility which employ 153 local people. In addition to the \$ 8 MILLION in annual payroll, we provide the local economy with another \$2 MILLION in purchased goods and services and are the County's' largest private employer.

In my testimony before the House in 1991 regarding the original Proposal to collect off site hazardous waste treatment fees. I supported the concept of revenue generating fees for permit programs in the Department of Health and Environment. The legislation at that time was and is consistent with RCRA. Many States have followed the progressive lead of Kansas in developing a fee structure that recognizes the benefits of energy recovery and recycling. We have paid \$ 123,726 under this fee to the Department over the last four years and are in full support of continuing to fund the direct services and oversight we receive from the Department. We continue to work at improving our relationships with the Department in the

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February 7, 1996  
Attachment 4

permitting, inspection and oversight roles which they have.

I appear before you today in continued support of a fee program but in opposition to the proposed changes which are inconsistent with RCRA and contained in the proposed Senate Bill 531.

1. These changes are a step backward in promoting resource recovery and recycling and are inconsistent with RCRA. This single interest Bill is in support of the Rollins Environmental Toxic Waste incinerator.
2. The Rollins incinerator is the only one in the country that burns Dioxin and PCBs, substances that have the highest degree of hazard. Rollins receives \$1.00 /lb. or more for disposal of this material.
3. The Rollins incinerator at Aptus utilizes technology was constructed & developed over 10 years ago and is operating under the same dated permit. The technology is similar in design to the Incinerator that exploded in Ohio a few weeks ago and remains closed by Ohio EPA. It is inferior for managing certain energy bearing hazardous wastes when compared to utilizing a cement kiln for recovery of fuel and manufacture of a product.
4. Lafarge handles different waste streams than Rollins, our cement kilns utilize low hazard energy bearing waste, we control the solids and metals to levels allowed in our Certification of Compliance. The Rollins incinerator handles Highly Toxic , HIGH HAZARD low BTU hazardous wastes and should pay proportionally higher fees as allowed in the current legislation.

I urge you to defeat this special interest legislation and support viable manufacturing systems that utilize resource recovery.



## TESTIMONY

by

Kansas Cement Council

Before the

### SENATE ENERGY AND NATURAL RESOURCES COMMITTEE

Regarding SB 531 - Hazardous Waste  
February 7, 1996

Good morning Mr. Chairman and members of the committee. Thank you for the opportunity to appear before you today with our comments on Senate Bill No. 531 concerning hazardous waste treatment fees.

My name is Edward Moses. I represent the Kansas Cement Council. The Kansas Cement Council is a group of Kansas cement plants comprised of the Heartland Cement Company, Independence, Ash Grove Cement Company, Chanute and Lafarge Corporation., Fredonia. All of these plants are currently engaged in the burning of hazardous waste material as a substitute fuel source in the manufacture of cement. This technology is extensively used as a primary fuel source at all three locations. The advantage of this energy saving system are several fold:

- (1) It is a resource recovery system that utilizes flammable, hazardous waste liquids and solids in the normal cement making process thereby reducing the need for alternate fuels such as coal.
- (2) By using these waste materials as a substitute for coal it saves burning several thousand tons of coal per year, reducing the resulting sulfur dioxide (SO<sub>2</sub>) and carbon dioxide (CO<sub>2</sub>) emissions from the burning of this fossil fuel.
- (3) As the process treats the waste materials they need not be permanently landfilled, injected into deep wells, or commercially incinerated.
- (4) It makes our Kansas cement industry a profitable operation, which otherwise it presently would not be. The Kansas cement industry generates substantial tax flow into the state and employs several hundred people in Southeast Kansas and provides quality construction materials for the people of Kansas.

Our technology is favorably recognized nationally and in the state of Kansas. Development and installation of this new resource recovery method represents a major investment for our companies and their business partners. Several million dollars in capitol improvements have been invested in Kansas alone.

The Kansas cement industry is not in the **commercial** waste incineration business. The industry has no interest in these fuel wastes unless they can be acquired and burned at less cost than the price of fossil fuels. Fuel expense for the rotary cement kilns represent about 1/3 of the cost of manufacturing Portland cement. As one way of remaining competitive in a seriously depressed cement market, the industry has focused on the reduction of fuel cost through the use of alternate fuels, such as those derived from hazardous waste. The use of these waste fuels has

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Attachment 5

become one of the rare events when good environmental practice also produces positive economic benefits. Fees, based on quantities treated, of course increase our cost of fuel. If fees are raised, at some point the Kansas cement industry will no longer be able to burn hazardous waste in their kilns. It is also certain that the jobs of our employees in Southeastern Kansas will then also become less secure. Unfortunately, with the increased importation of environmentally unregulated cement from Mexico there is no economically viable alternative. At the turn of the century Kansas was a leader in national cement production with 17 cement mills. Today there are only 4 cement mills left. A change in current policy could ultimately result in preventing a beneficial method for the treatment of hazardous waste and have unfavorable economic consequences as well. In other states where the commercial incineration industry has been successful in "leveling the economic playing field", such as Tennessee and Texas, the cement industry has merely left the "playing field".

Our industry has no problem with the Kansas Department of Health & Environment (KDHE) having the authority to require reasonable regulations and mandate fees to defray the cost of permitting, reviewing, and monitoring hazardous waste management. Accordingly, we supported the passage of House Bill 2021 in 1991. At that time we made an overwhelming case for the regulation of our industry in a different manner from the commercial incineration industry; and the legislature supported this policy with the approval of HB 2021 now current law.

Today, we think this policy should be continued for a number of valid reasons:

- Economics - We think the people of Kansas will benefit economically in several different manners. By recovering energy through the treatment of hazardous waste we provide a more economical means of management for hazardous waste generators in Wichita, Kansas City and beyond. Thus assisting other Kansas industries to remain competitive. Further, by converting this waste to energy, we produce a value added and environmentally friendly product (cement) for the Kansas construction industry at a competitive price. Finally, we save both local and state governments the problems and expense of dealing with an even larger waste streams. Finally, the Kansas cement industry provides over 600 highly paid jobs in Southeast Kansas.
- Technically - There are several reasons in favor of maintaining current law. As the commercial incinerator sponsoring this bill does burn highly toxic wastes and is the only processor of Dioxins in the nation, we think there is justification in setting a higher fee for the higher risk associated with the monitoring and regulation of this hazardous waste stream. A cement kiln treats waste at 2700°F - 3200°F while traveling through a 700 ft. - 800 ft. kiln achieving complete (99.99%) destruction. A commercial incinerator, constrained by design, can only afford to burn at much lower temperature over a shorter period of time. Thus, promoting the need for closer monitoring by government. The commercial incinerator industry sometimes will allege as we now burn "dirtier" or blended fuels the cement kilns should be regulated on the same basis. The truth is we burn "cleaner" fuels today, than when this regulatory program was first passed and the average BTU content is higher (see attached charts).
- Policy - In 1991 the Kansas Department of Health & Environment proposed and the legislature wisely adopted a policy of regulating cement kiln fuels in a different manner. The purpose in doing so was to encourage a more efficient use of our waste streams. Current policy in other jurisdictions tend to support these principals and goals. At the Federal level cement kilns standards are more stringent than older commercial incinerators under both the Boiler & Industrial Furnace (BIF) regulations and the Resource Conservation and Recovery Act (RCRA). Many other states provide incentives to recycle waste through energy recovery. Among them are North Carolina,

Oklahoma, Oregon, Texas, Ohio, Georgia, Louisiana, Maine, Massachusetts, and Maryland. Governments, since the beginning of government, have always used tax incentives and other differential regulatory policies to promote positive outcomes. Yes, creating a "level playing field" is appropriate when all the players are in the "same ballpark", but clearly this is not the case here.

The legislation before you today, sponsored by one and only one company, is a predatory attempt to use government policy to destroy the market efficiencies of a whole industry. To approve this legislation would provide a windfall for one firm. A windfall paid for by all Kansans through increased hazardous waste treatment fees, and decreased economic efficiency in the Kansas cement industry. We urge this committee to maintain the current policy by rejecting SB531.

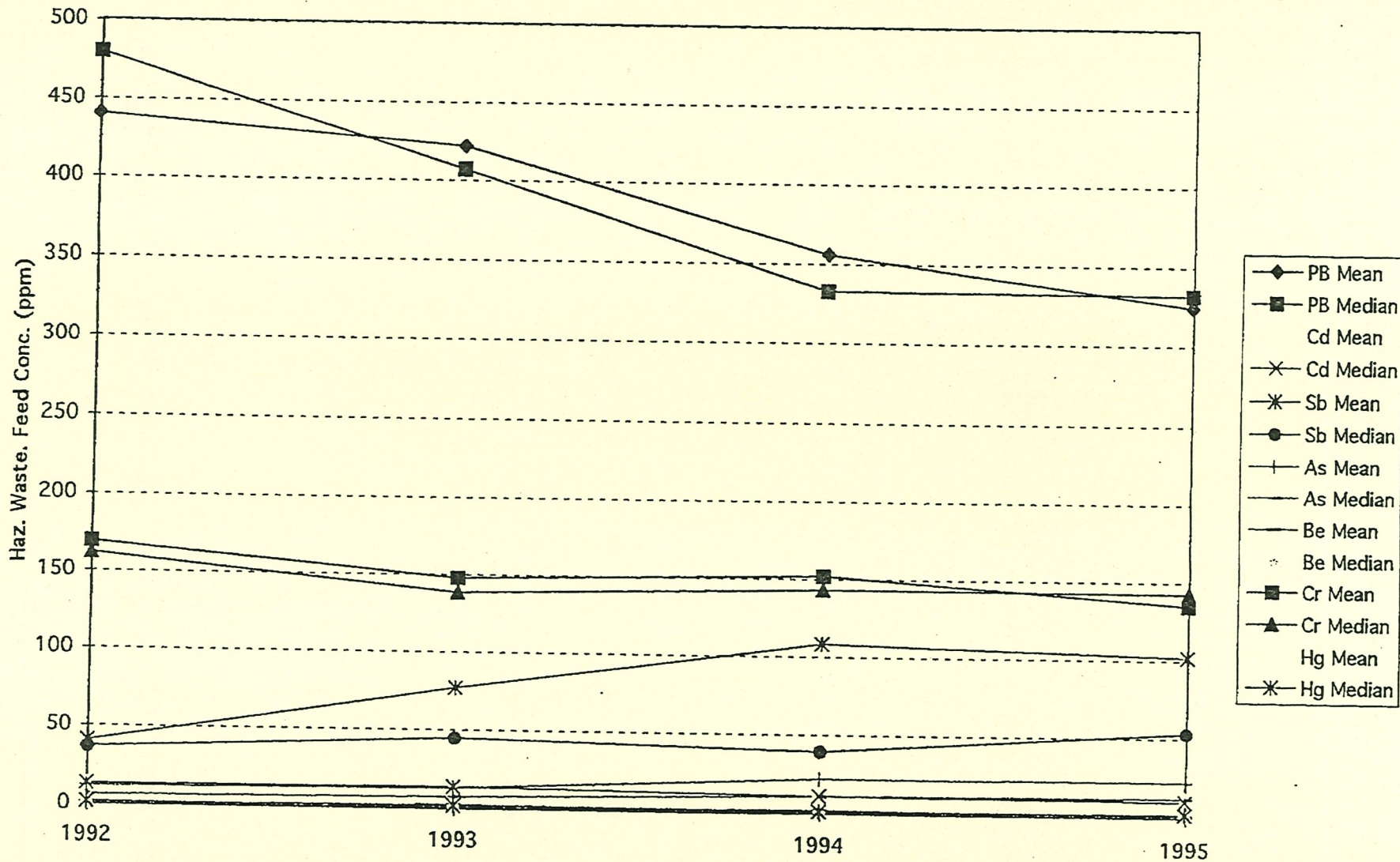
Thank you for the opportunity to appear before you this morning. I will be happy to respond to any questions you may have.

TABLE 1

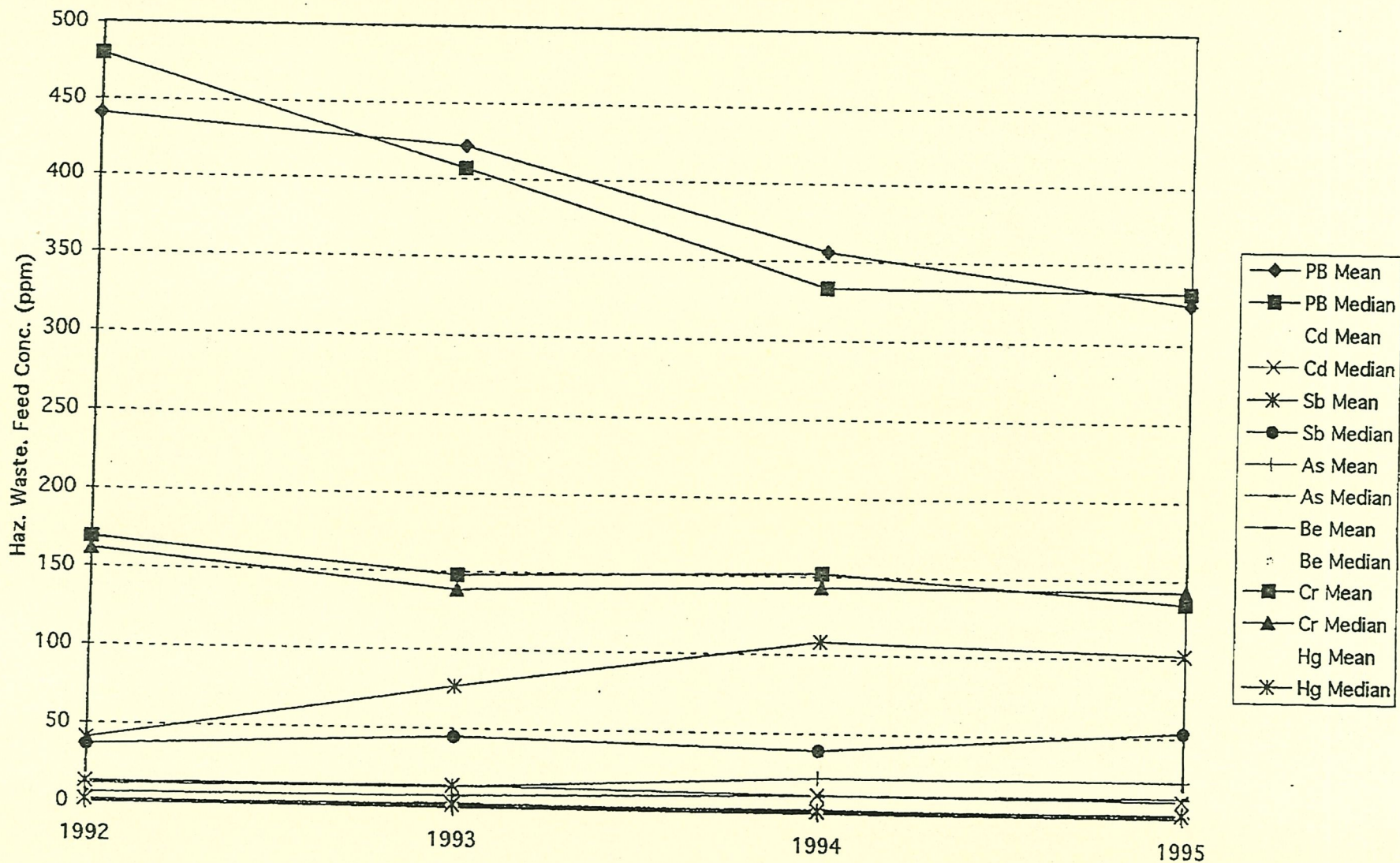
	NACR Shipments to Cement Kilns (Weighted Average Concentration)	NACR Shipments to Incinerators (Weighted Average Concentration)
	126,660,181 gallons 506,640 tons	28,701,250 gallons 114,804 tons
Antimony	81.51 (ppm)	411.41 (ppm)
Arsenic	6.18	391.24
Barium	783.67	787.52
Beryllium	1.78	389.68
Cadmium	13.82	410.39
Chromium	142.44	537.42
Lead	404.99	509.27
Mercury	2.66	389.93
Silver	16.61	391.64
Thallium	46.49	393.77
Average Heat Value	12,072.74	3,978.77
Average Halogen Content	1.87	15.58

Metals	Cement Kilns Total Mass Shipped Tons	Cement Kilns % of Total Mass Shipped	INCIN. Total Mass Shipped Tons	INCIN. % of Total Mass Shipped
Antimony	41	47	47	53
Arsenic	3	7	44	93
Barium	397	81	90	19
Beryllium	0.9	2	44	98
Cadmium	7	13	47	87
Chromium	72	54	61	46
Lead	205	78	58	22
Mercury	1	3	44	97
Silver	8	16	44	84
Thallium	23	34	45	66

Industry Trend Data All Metals of Concern

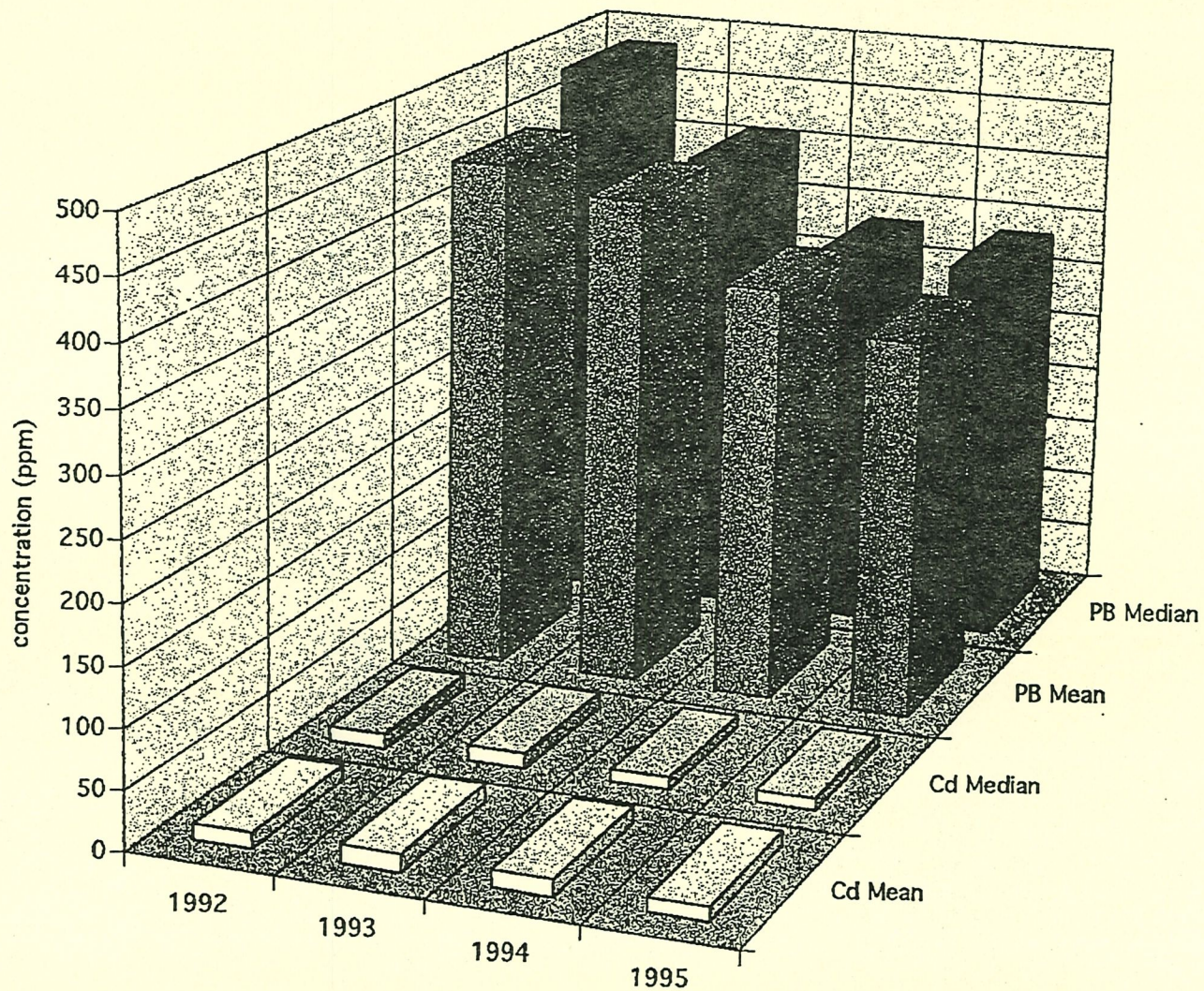


Industry Trend Data All Metals of Concern

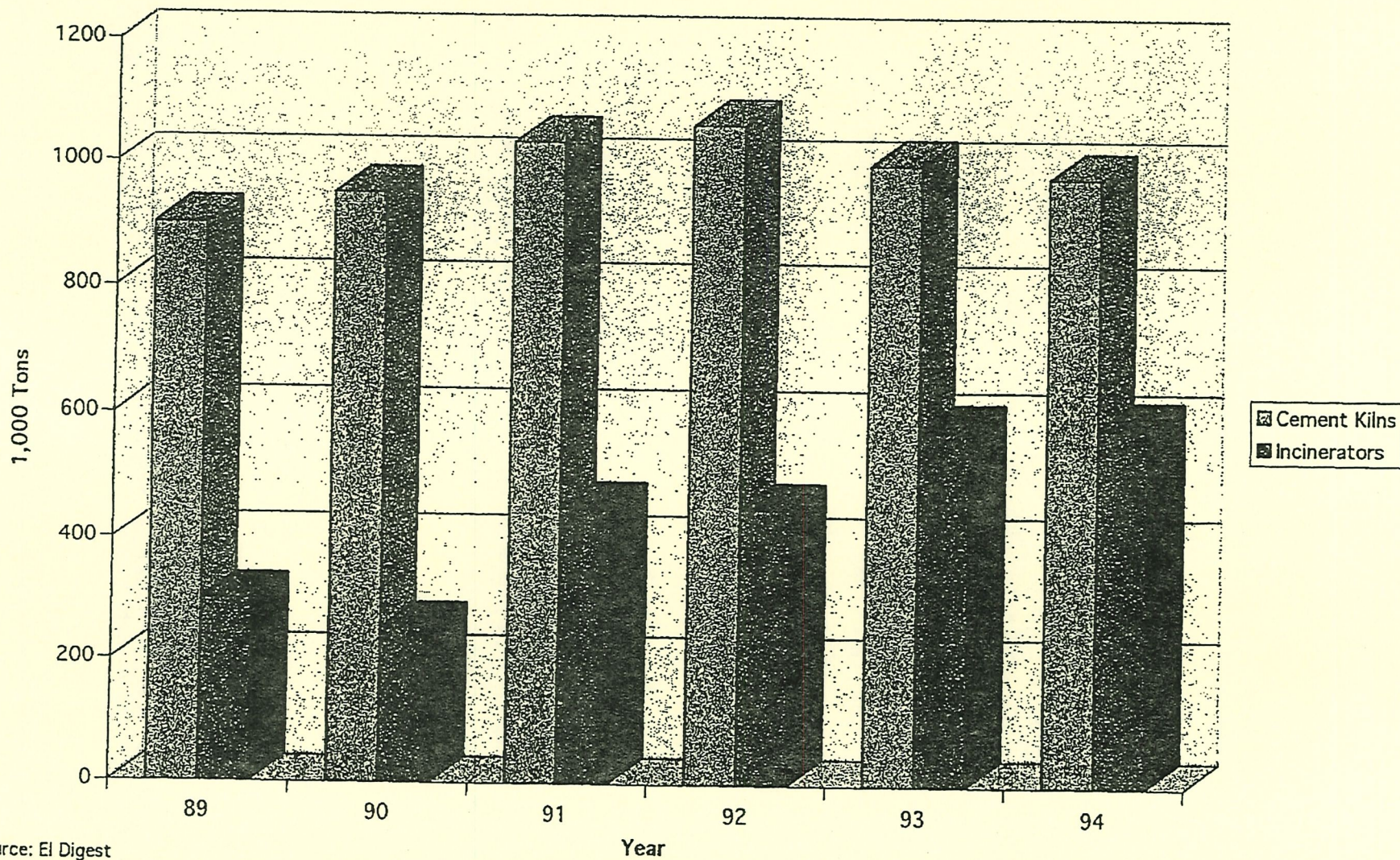


CKRC Member Data Chart 3

Cement Industry Trend Data  
(Lead and Cadmium)



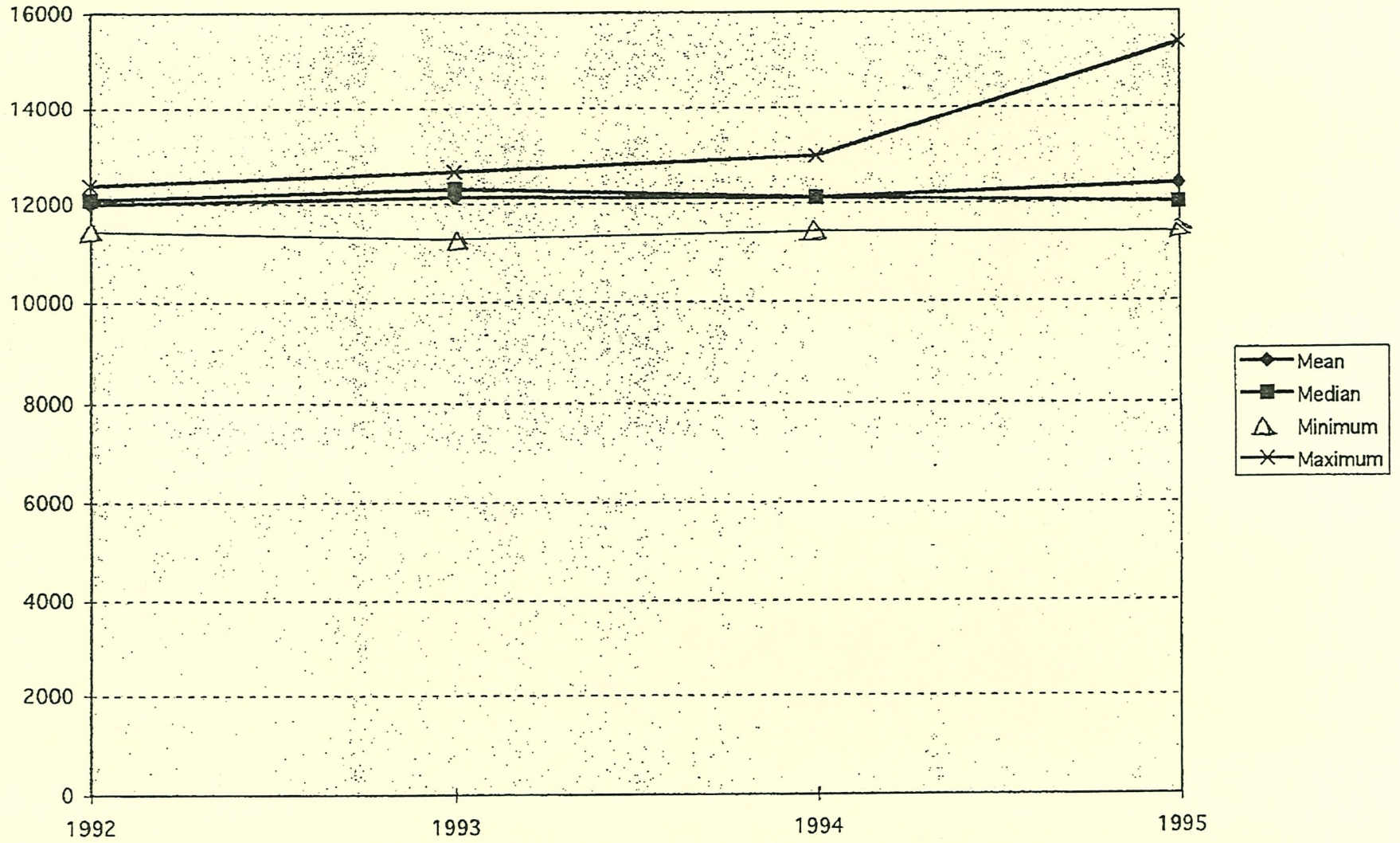
### Volume of Hazardous Waste Used in Cement Kilns and Commercial Incinerators



Source: El Digest



Industry Trend Data  
Average Btu/lbs. Content



**BRACEWELL & PATTERSON, L.L.P.**  
 A REGISTERED LIMITED LIABILITY PARTNERSHIP  
 ATTORNEYS AT LAW

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 214 740 4000

43 BROOK ST  
 LONDON W1V 2BL ENGLAND  
 44 71 355 3330

MEMORANDUM

**TO:** Cement Kiln Recycling Coalition

**FROM:** Scott H. Segal, Esq.  
 Bracewell & Patterson, L.L.P.

**DATE:** February 6, 1996

**RE:** Proposed Amendment to K.S.A. 65-3431

It is our understanding that APTUS, the owner and operator of a commercial incineration facility in direct economic competition with several cement plants in Kansas, has proposed an amendment to K.S.A. 65-3431, a provision of the Kansas Public Health Code dealing with waste management.

Under the APTUS proposal, the current policy favoring a facility that "recycles and utilizes hazardous waste primarily to recover useful energy or materials to be used in the manufacture of a product"<sup>1</sup> would be eliminated. In its place, APTUS proposes to treat recycling with equivalent encouragement as burning waste for non-productive destruction. APTUS would suggest that in the event the U.S. Environmental Protection Agency ("EPA") adopts some program termed a "'clean fuels' specification," qualifying companies may pay a lower fee as assessed by the Secretary of the Department of Health and Environment ("the Secretary").

The APTUS proposal is fatally flawed for two reasons. First, it is wholly inconsistent with unambiguous expression of legislative support for recycling and energy recovery activities in the state of Kansas. Second, the APTUS proposal may be unconstitutionally vague.

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<sup>1</sup> Kan. Stat. Ann. tit. 65, § 3431(x)(1)(1994).

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**I. The APTUS Proposed Amendment is Inconsistent with Kansas Legislative Support for Recycling.**

The use of hazardous waste-derived fuels ("WDF's") as a partial substitute for fossil fuels in cement kilns is a form of recycling: energy recovery. The manufacturing of cement is inherently energy intensive.<sup>2</sup> Cement kilns can replace from 20 to 70 percent of their reliance upon fossil fuels with WDFs, saving the equivalent of 168 million gallons of oil or one million tons of coal annually. In addition to providing a safe and effective waste management technique, energy savings from reduced fossil fuel usage also produces environmental benefits in the form of reduced sulfur dioxide and greenhouse gas emissions. These environmental benefits are typical of those Kansas and other states expect to receive from well-run recycling and energy recovery programs.

The APTUS proposal would remove incentives for recycling by recognizing no differences between energy recovery and burning hazardous waste for destruction in otherwise non-productive devices. In commercial incineration devices, the state of Kansas cannot anticipate reduced fossil fuel usage and therefore cannot anticipate reduced sulfur dioxide, greenhouse gases, or other environmental harms resulting from consumption and production of energy.

The section APTUS targets is just one manifestation of Kansas' clear support for recycling and energy recovery programs. In the very next provision of the same Article of the Kansas Statutes, the Secretary is also required to "encourage, coordinate or participate in one or more waste exchange clearing houses for the purpose of promoting reuse and recycling of industrial wastes."<sup>3</sup> No such infrastructure is encouraged for mere waste incineration. The APTUS proposal is inconsistent with "promoting reuse and recycling" as described in this section.

The APTUS proposal is also inconsistent with Kansas state law establishing specific coordinators and commissions to encourage recycling. For example, the statewide

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<sup>2</sup> According to the Portland Cement Association's Report on Energy Efficiency (1992), the average energy needed to make a ton of cement in a U.S. cement kiln is 4.8 million Btus, or the energy equivalent of approximately 425 tons of coal. Each year, the domestic cement industry burns the equivalent of about 16 million tons of coal.

<sup>3</sup> Kan. Stat. Ann. tit. 65, § 3431(y)(1994).

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coordinator of waste reduction, recycling and market development is specifically tasked with the mission:

"to promote actively the development of markets for recycled products by working with industry and public entities to maximize current markets and explore the possibilities of new markets."<sup>4</sup>

The next article of the Kansas Statutes establishes a commission on waste reduction, recycling and market development. Among other tasks, the commission is required to recommend specific actions that: "develop markets for recycled and recyclable products;" "change state procurement practices to promote recycling;" and "create opportunities for recycling enterprises."<sup>5</sup> Of course, the encouragement of recycling and energy recovery in Kansas law is also reflected in applicable federal statutes, such as the Resource Conservation and Recovery Act.<sup>6</sup>

The current fee structure for recycling and energy recovery of wastes in cement kilns is part of a consistent pattern in Kansas state law and federal law to identify recycling opportunities and to encourage such opportunities vigorously. The APTUS proposal is inconsistent with this Kansas and federal precedent.

## II. The APTUS Proposed Amendment is Too Vague to be Adopted.

The APTUS language refers to something termed a "'clean fuels' specification" that may or may not be under consideration by the federal EPA. APTUS would have Kansas make its tax law conditional upon a hypothetical federal program about which Kansas has little knowledge or input. No "'clean fuels' specification" has been proposed by EPA at this point, and the term is a value-laden one over which there may be substantial disagreement. Already, "clean fuels" may refer to several competing concepts that may have categorically different effects on waste management practices. The attempts by the commercial

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<sup>4</sup> Kan. Stat. Ann. tit. 74, § 5087(b)(1994).

<sup>5</sup> Kan. Stat. Ann. tit. 74, § 5088(d)(2), (4) - (5)(1994).

<sup>6</sup> EPA has long recognized the "fundamental RCRA goal of encouraging energy recovery from wastes" in RCRA section 1002(d). 54 Fed. Reg. 48,422 (1989).

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incineration industry to imply a uniform meaning in the concept has already met with strong resistance from other industrial groups.<sup>7</sup>

At the very least, it is unclear what APTUS means; at the worst, the APTUS proposal is indefinite and uncertain. Therefore, APTUS may have proposed an amendment that is void for vagueness. As one constitutional scholar noted:

"As a matter of due process, a law is void on its face if it is so vague that persons 'of common intelligence must necessarily guess at its meaning and differ as to its application.'"<sup>8</sup>

Not only do persons of "common intelligence" guess at the meaning behind APTUS' reference to clean fuels; so too must interested parties within the waste management industry.

Given that the APTUS amendment to K.S.A. 65-3431 both is a radical departure from accepted principles in Kansas environmental law and is drafted in an unreasonably vague manner, the Kansas Legislature should reject it on its face. If you have further questions, please call at (202) 828-5845.

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<sup>7</sup> See, e.g., BNA Env't'l Rep., Dec. 16, 1994 at 1609 (Chemical Manufacturers Association President Frederick L. Webber wrote to the commercial incineration trade group ARTT that, "CMA's members have very serious misgivings about ARTT's agenda, in terms of both its substance and the manner in which it is advanced.").

<sup>8</sup> Laurence H. Tribe, American Constitutional Law, § 12-31 at 1033 (1988), citing Connally v. General Construction Co., 269 U.S. 385, 391 (1926). See also, Lanzetta v. New Jersey, 306 U.S. 451, 458 (1939)(property cannot be taken away by virtue of a statute whose terms were "so vague, indefinite and uncertain" that one cannot determine their meaning).