

## **MINUTES**

### **MONTANA HOUSE OF REPRESENTATIVES 53rd LEGISLATURE - REGULAR SESSION**

#### **COMMITTEE ON NATURAL RESOURCES**

**Call to Order:** By VICE CHAIRMAN ROLPH TUNBY, on March 17, 1993,  
at 3:30 p.m.

#### **ROLL CALL**

##### **Members Present:**

Rep. Rolph Tunby, Vice Chairman (R)  
Rep. Jody Bird (D)  
Rep. Vivian Brooke (D)  
Rep. Russ Fagg (R)  
Rep. Gary Feland (R)  
Rep. Mike Foster (R)  
Rep. Bob Gilbert (R)  
Rep. Hal Harper (D)  
Rep. Scott Orr (R)  
Rep. Bob Raney (D)  
Rep. Dore Schwinden (D)  
Rep. Jay Stovall (R)  
Rep. Emily Swanson (D)  
Rep. Howard Toole (D)  
Rep. Doug Wagner (R)

**Members Excused:** Rep. Dick Knox, Chairman (R) (for portion of  
meeting)

**Members Absent:** None

**Staff Present:** Todd Everts, Environmental Quality Council  
Michael Kakuk, Environmental Quality Council  
Roberta Opel, Committee Secretary

**Please Note:** These are summary minutes. Testimony and  
discussion are paraphrased and condensed.

##### **Committee Business Summary:**

Hearing: SB 338, SB 72 and SB 196  
Executive Action: None

#### **HEARING ON SB 338**

##### **Opening Statement by Sponsor:**

SEN. BILL YELLOWTAIL, SD 50, Wyola, presented SB 338 regarding  
the siting for commercial dangerous waste incineration  
facilities.

SEN. YELLOWTAIL stated SB 338 was a simple bill that addresses

important public policy regarding the siting of incinerators in Montana. The siting criteria for SB 338 require that a hazardous waste facility be prohibited within three miles of residential dwellings, surface waters within 100 year flood plain, farmlands, dam-failure flood areas, fault lines and any area likely to be impacted by earth movement or any area of risk to public health or non-compliance with zoning regulations. He also said this criteria does not apply to medical facilities or oil refineries.

SEN. YELLOWTAIL stated it was clearly the will of Montanans to enact siting criteria for the long term health and welfare of Montana citizens. He suggested the committee draft a standard of protection for Montana citizens, children, homes, farms and water. Public health beyond a reasonable doubt is imperative, he noted.

Proponents' Testimony:

Sarah Barnard, Bozeman, stated the dangerous waste designation within the bill followed similar federal legislation. EXHIBIT 1

Steve Gipe, Bozeman physician, testified on behalf of physicians in Gallatin County. EXHIBIT 2

Redge Meierhenry, Clancy, testified that siting criteria proposed in SB 338 is similar to criteria in neighboring western states.

Jackie Forba, Montana City, supported SB 338 EXHIBIT 3 and submitted a list of Helena physicians and surgeons who support the bill. EXHIBIT 4 and EXHIBIT 4a

Tim Huls, Montana Dairymen's Association, stated many dairymen are concerned about the prospect of hazardous waste burning sites near areas where hay and grain is grown. MDA is concerned about ingestion of dioxin and the safety of food supplies.

Anne Johnson, Bozeman, distributed a capacity chart showing the volume of hazardous waste (tons) produced in, and exported from, Montana in 1991. Ms. Johnson said it is untrue that Montana will be removed from the Western State's Agreement if the state does not commit itself to the incineration of dangerous waste. She also said Montana's capacity status is not an issue in SB 338.

Ken Jacobs, Jacobs Western Land Brokerage, Bozeman, testified in support of SB 338. EXHIBIT 6

Helen Waller, Circle, submitted support testimony on behalf of Northern Plains Resource Council and Jerry Sikorski, farmer/rancher from Baker. EXHIBIT 7 She said if there is error, let it be on the conservative side.

Deb Berglund, Gallatin County Commissioner, said the people testifying at the hearing were speaking on the basis of science, not hysteria. EXHIBIT 8 She said the majority of people in

Gallatin County, as well as the Bozeman City Commission and the Gallatin County Commissioners, do not want a hazardous waste incinerator a few hundred feet from the river and upwind from populated areas.

Rachel Rauesirs, Montana City, on behalf of the Jefferson County Commissioners, submitted supportive testimony for SB 338.

EXHIBIT 9

Phyllis Lefohn, Clancy, testified on behalf of herself and her husband, Allen S. Lefohn PhD. EXHIBIT 10

Eric D. Schneider, PhD research ecologist, Livingston, testified in support of SB 338. EXHIBIT 11

Rebecca E. Johnston, White Sulphur Springs, supported SB 338, EXHIBIT 12. She submitted two newspaper articles from the Billings Gazette, EXHIBIT 13, and the Bozeman Chronicle, EXHIBIT 14. The following names were read as proponents of SB 338: Phyllis and Gene Hullness, Barbara and Ray Russell, Kay and Wallace Buckingham, Terry Mittlestadt, Ben Hurwitz, Julie Witt, Bill and Joan Rostadt, Wayne and Terry Buckingham, Diane Russell and Rick Bird.

Paul Smietanka, Chairman of the Jefferson County Solid Waste Board, submitted written testimony. EXHIBIT 15 Mr. Smietanka suggested that any solution to hazardous waste incineration should be comprehensive and not a piecemeal approach. He wondered if the committee would prefer to live upstream or downstream, one mile or 100 miles, from a cement kiln burning hazardous waste.

Lew Dunn, Coualo, CA., who lives near an incineration plant, stated he was asked to appear in support of SB 338. There has never been any enforcement in this country on any facility burning toxic waste, he said. He said forty-four percent of the residents of Coualo (between 1977 and 1985) are now deceased because they resided near this facility.

Ed Schuple, Montana City rancher and environmental consultant, stated he strongly favored SB 338. He said metals can be changed but not destroyed, and these toxins will always be in the dust from the cement kilns. The lead content in the soil in the Deer Lodge Valley is 156 parts per million; toxic is three parts per million.

Annette Cade, Clancy, on behalf of the Montana City School Board of Trustees, said the school has 300 of the best reasons to pass SB 338. She stated children have come in from the playground with particulate matter from the plant stacks on their skin and in their hair. She also stated she did not want to be in the middle of the next superfund site.

Pat Tallent, Clancy, Vice President, Montana City Parent Teachers

Association (PTA), testified on behalf of its 10,200 members. He said that until it can be proven without a doubt that the process of incinerating hazardous waste is not harmful to the environment or children, Montana's lawmakers must protect those in our society who are unable to protect themselves.

CHAIRMAN DICK KNOX returned to the meeting and assumed the chairman's position.

Christopher Pope, Bozeman, owner of The Great Rocky Mountain Toy Company and Vice President of the Board of the Downtown Bozeman Association, testified in support of SB 338. EXHIBIT 16

Brady Wiseman, Bozeman, representing the 250 members of Montanans Against Toxic Burning, supported SB 338.

John Hamewald, White Sulphur Springs, testified for SB 338. EXHIBIT 17

Greg Van Horssen submitted written testimony. EXHIBIT 18

Lester Field, Townsend, supported SB 338. EXHIBIT 19

Neighbors of Ash Grove Cement Plant, opposed to SB 338, submitted a six page informational packet.

Marilyn Atkins, Helena, submitted petitions supporting siting legislation for dangerous waste facilities. EXHIBITS 20

Kate Nicholes, Lennep, appeared in support of SB 338. Passage of the bill will attract other high-tech businesses to Montana, she said.

Paul Johnson, Montana City, supported SB 338. He submitted four photos of school children in Montana City playing in the cloud from the Ash Grove Cement Plant. EXHIBIT 21 He indicated the photos well illustrate the need for a seeding act in Montana.

Dennis Semprini, Bozeman, submitted petitions supporting SB 338. EXHIBIT 20

Additional petitions from Texas residents supporting SB 338. EXHIBITS 20a and 20b

Joe Frost, Bozeman City Commissioner, supported the bill.

Mary Frost, Belgrade school teacher, urged support of SB 338.

Maggie Pittman, on behalf of her family and neighbors, asked for support of the bill.

William Hall, rancher, Clancy, resident within three miles of the Ash Grove Cement Plant, asked for support of SB 338.



Joanne Hall, Clancy, sheep rancher, expressed concern and hope that SB 338 would pass.

Erik Sirs, Montana City, on behalf of his family, urged support of SB 338.

Will Swearingen, research professor at Montana State University, Bozeman, asked for strong support of the bill. EXHIBIT 22

Tom Ryan, Helena, urged the committee to lead with their hearts and support SB 338.

Richard E. Bach, Clancy, submitted written testimony. EXHIBIT 23

Larry M. Barnyard, Bozeman, testified in support of SB 338. EXHIBIT 24

Ellen Bourgeau, Missoula, President of the Montana Congress for Parents, Teachers and Students, supported SB 338 on behalf of the Association's 10,250 members. EXHIBIT 25

Hobart Collins, Bozeman, testified in support of SB 338. EXHIBIT 26

Mark Norden, Big Timber, testified in support of SB 338. EXHIBIT 27

Page B. Anderson, Three Forks, supported SB 338. EXHIBIT 28

Wayne and Terry Buckingham, White Sulphur Springs, supported SB 338. EXHIBIT 29

Ben Hurwitz, rancher, White Sulphur Springs, submitted written testimony. EXHIBIT 30

Diann Russell supported SB 338. EXHIBIT 31

Mr. and Mrs. Wallace Buckingham, White Sulphur Springs, stated they were concerned about air, water, and crop contamination. EXHIBIT 32

Julie Witt, White Sulphur Springs, supported SB 338. EXHIBIT 33

Mr. and Mrs. Eugene Halmes, ranchers from White Sulphur Springs, support SB 338. EXHIBIT 34

Terry L. Mittlestadt, White Sulphur Springs, testified in support of SB 338. EXHIBIT 35

Barbara Russell, rancher, White Sulphur Springs, supported SB 338. EXHIBIT 36

Ray Russell, White Sulphur Springs, supported SB 338. EXHIBIT 37

Richard Berg, Martinsdale, fourth generation Montana rancher, appeared as a bill proponent. EXHIBIT 38

Barb and Don Harris, Helena, expressed concern about incineration of hazardous waste. EXHIBIT 39

David K. Nation, Vice President and General Manager, Special Resource Management, Inc., Butte, submitted written testimony. EXHIBIT 40

Connie and Doug Denler, Clancy, supported the bill. EXHIBIT 41

Richard E. Bach, Clancy, nearby resident of the Ash Grove Cement Plant, appeared in support of SB 338. EXHIBIT 42

Sara Jane Johnson and Tom Glorvigen, KOA Kampground, Three Forks, urged support of a strong hazardous waste siting bill in Montana. EXHIBIT 43

Kane and Anita Quenemoen, Clancy, stated hazardous waste siting was neither a jobs nor an industry issue. EXHIBITS 44 and 44a

Sandee Spendlove, Helena, stated that Montana's children and waterways should not be used as guinea pigs. EXHIBIT 45

Michael Beele testified that all the facts were not in regarding the acceptable burning of hazardous waste and urged the committee to support passage of SB 338. EXHIBIT 46

Jim Hoyne submitted written testimony. EXHIBIT 47

Steve and Joan Scarff, Bozeman, strongly support SB 338. EXHIBIT 48

Wade Sikorski, PhD., Fallon County, stated SB 338 made good sense. EXHIBIT 49

George Schlosser, Helena, asked the committee to support SB 338.

Opponents' Testimony:

Jerome Anderson, Helena attorney, on behalf of Holnam, Inc., submitted the names of seven opponents to SB 338 who would testify. EXHIBIT 50

Tom Daubert, on behalf of the Ash Grove Cement Company, opposed SB 338. EXHIBIT 51

Stuart Weiss, Senior Process Engineer, Holnam, Inc., opposed SB 338. EXHIBIT 52

Dr. Kathryn Kelly, toxicologist, Environmental Toxicology International, Seattle, submitted opponent testimony. EXHIBIT 53

Bill Springman, plant manager, Holnam's Trident Plant, opposed SB 338. EXHIBIT 54

Dan Peterson, plant manager, Ash Grove Cement Plant, Montana, City, submitted written testimony of his own, EXHIBIT 55, and on behalf of the former Speaker of the Arkansas House of Representatives, Marion H. Crank. EXHIBIT 56

Chuck Wiedenhoft, Vice President, Technical Director, Holnam, Inc., testified in opposition to the bill. EXHIBIT 57

Don Peoples, National Environmental Waste Technology Center, (NEWTEC), stated that passage of SB 338 would affect approximately 200 jobs in Butte and the Environmental Protection Agency (EPA).

Tim Smith, Ashgrove Cement Plant employee, testified that the plant employs 80% of the work force in Montana City.

Larry Craft, President, Aluminum Workers Trades Council, Columbia Falls Aluminum Company, testified on behalf of approximately 540 union workers at CFAC. EXHIBIT 58.

Raymond R. Sorenson, officer and member of local 320, Aluminum, Brick and Glass International Union, opposed SB 338. EXHIBIT 59

Will Selser, Director, Environmental Health Division, Lewis and Clark City-County Health Department, stated he did not support or oppose the burning of hazardous materials in cement kilns. He said, however, SB 338 is not good public health legislation. EXHIBIT 60

Wyatt Frost, Bozeman, Holnam employee, told the committee that SB 338 was a no-siting bill.

Bob Roberts said the state should have the right to burn its own waste.

David Nation, Special Resource Management, Inc., Butte, opposed SB 338. EXHIBIT 61

David Owen, Montana Chamber of Commerce, said he opposes the bill.

Frank Miskot, Butte, opposed SB 338.

Peggy Trenk, Western Environmental Trade Association, WETA, stated there was a danger in excessive siting regulation. EXHIBIT 62

Bill Thompson, Ashgrove employee, said he knows former Ashgrove employees who did not wear masks in the plant.

Jim Schield, Ashgrove Cement Plant, said current permitting is

very rigorous and the existing permit process should be allowed to do its work.

Jim Liebtrall, Anaconda, said he was opposed to SB 338.

SEN. JOHN BRENDEN, SD 10, SCOBAY, said he was concerned that the 700 workers at the Columbia Falls aluminum plant could lose their jobs.

George Brocklehurst, Livingston, representing Hallet Minerals, opposed SB 338.

Bud Kimball, Deer Lodge, urged the committee to oppose the bill.

Russ Ritter, on behalf of Montana Rail Link, said its 850 members are opposed to SB 338.

Al Hill, Montana City, testified in opposition to the bill.

Paul Bessler, Holnam plant employee, said he is exposed to the plant dust 24 hours a day at work and at his home near the plant and is opposed to SB 338. EXHIBIT 63

Joe Schiller, Ashgrove Cement Plant employee, said he opposed the bill.

Randy Smith, Livingston, environmental scientist, regulator, and consultant for fourteen years expressed his opposition to SB 338 as written.

Ron Drake, chemical engineer, Helena, submitted opponent testimony urging the committee not to pre-empt the process. EXHIBIT 64

Mike Collins, Helena, third generation Montanan employed by the Ashgrove Cement Plant, said there has been no evidence to prove cement dust is hazardous.

Questions From Committee Members and Responses:

REP. RANEY asked Dr. Kelly if all waste could be burned in cement kilns? Dr. Kelly replied that all waste is not suitable for burning in cement kilns.

REP. RANEY asked Dr. Kelly about burning waste generated in Montana in cement kilns. Dr. Kelly replied that, as a general classification, radioactive waste is not compatible in cement kilns but noted she was unsure if the waste stream generated in Montana could be managed in these kilns. She said there may be better technology for certain types of waste disposal.

REP. RANEY asked Mr. Peoples if it was true, as bill opponents noted, that hazardous waste burning is not dangerous to health, if there is a need for NEWTEC. Mr. Peoples said NEWTEC deals

with the current situation in the Butte Superfund area. SB 338 has a direct potential impact on the NEWTEC facility.

REP. RANEY asked Tom Daubert if the chart showing 30,000 tons of waste generated in Montana included Columbia Falls? He also asked what the plan would be for collecting this waste and which cement kiln would be used for burning the waste. Mr. Daubert stated, yes, it would include Columbia Falls. He said if safety can be proven through Montana's permitting process, a solution can be found for burning Montana's hazardous waste. He also said it will become more affordable for some companies to burn waste in Montana cement kilns rather than shipping out of state. He noted hazardous waste is not homogenous.

REP. RANEY said his concern regarded the 65,000 tons of waste burned in the two Montana plants. He stated if Montana generates 30,000 tons of waste, it seems the concern is not to burn Montana waste but to burn waste. Mr. Daubert said the primary concern is to provide, at a lower cost, fuel that is extremely energy intensive. He noted that, if safety can be proven, there is no difference functionally between importing 30,000 tons of coal from Wyoming or importing 300,000 million cubic feet of natural gas from Canada.

REP. RANEY asked Mr. Daubert if he was aware of Columbia Falls involvement in a Washington project to dispose of their waste. Mr. Daubert said he was not aware of the project but that he was aware that waste from the Washington company is presently shipped to a landfill in Oregon at a cost of \$700,000. He also said that in 1994, this Oregon landfill will be banned.

REP. RANEY said he did not understand why, if hazardous waste burning is all right, companies from across the country ship their waste to Montana to be burned in cement kilns. Mr. Daubert stated he did not advocate that permits to burn toxic waste should be issued to companies tomorrow. He stated it is proven that companies deserve the opportunity to prove the case, site specific.

REP. BROOKE asked Mr. Peoples if there had ever been an occasion for him to discuss the NEWTEC amendment with the bill's sponsor. EXHIBIT 65a Mr. Peoples replied that he had discussed the amendment with the sponsor. He noted that amending other legislation that defines research and development and removing any emotion associated with the bill might be a more appropriate way to reference SB 338.

REP. BROOKE noted that NEWTEC has never been a proponent or opponent to legislation before the House Natural Resources committee. Mr. Peoples stated NEWTEC deliberately took a neutral position as it did not want to become embroiled in the debate over public policy. He said NEWTEC is a research and development facility.

REP. BROOKE asked Dr. Kelly if she was aware of testimony regarding the ill-effects of toxic burning on Arabian horses in the Midlothian area. Dr. Kelly stated that the testimony cited by REP. BROOKE was considered in the final findings of the Texas Air Control Board, Cement Kiln Task Force, and no constraints were placed upon the plants based on their deliberation.

REP. BROOKE asked Mr. Wiseman which of the two figures, 13,605 tons or 30,000 tons, represented the total volume of hazardous waste produced in Montana in 1991. Mr. Wiseman said the chart figure was an actual DHES figure; RICRA generated hazardous waste. He noted that Mr. Dabuert depicted the potential for toxic waste production by small businesses.

Mr. Daubert commented that Montana generated 13,605 tons of garbage in 1991. More than 2,000 pounds of waste generated per month require a large quantity generator: more than 220 pounds per month require a small quantity generator. He stated that less than 200 pounds is unregulated.

Mr. Daubert continued by stating that his figures represented the most recent statistics on regulated waste in Montana plus an estimate of household waste currently going into landfills. These figures are based on actual census data. He also said it's important to note that the amount of waste does not always correspond to the size of the generator. Additionally, there may be violations of generator size.

REP. BROOKE again asked if there is more hazardous waste generated in Montana than 13,605 tons. Mr. Dabuert said, yes.

REP. TOOLE asked Walt Schuele, Schuele Ranch, to explain how heavy metals could be burned in a cement kiln. Mr. Schuele said that hazardous materials contain heavy metals. Cement kilns can only burn those wastes that have fuel or raw material value. He noted that he had worked on a hazardous waste cleanup in Livingston.

REP. TOOLE asked Dr. Kelly to comment on hazardous waste generated by industry in Montana, and if this burning would represent a significant impact on air quality. Dr. Kelly said the two cement kilns in Midlothian burned 110,000 tons of hazardous waste last year with no adverse affects on air quality reported.

REP. HARPER asked Dr. Kelly to explain the vast discrepancies among the experts regarding high temperature combustion and dioxin, and if she was aware of the recent ruling causing the East Liverpool, Ohio kiln to cease operation. Dr. Kelly replied the ruling did not state that the facility was asked to cease operation.

REP. HARPER said that the newspaper article stated the facility was closed but he would defer to Dr. Kelly's judgment. He also

said that in a memo from the EPA, the cancer risk was underestimated at an incinerator in East Liverpool. This memo noted that the health risks through the food chain may be 1,000 times greater than the direct risk. REP. HARPER asked Dr. Kelly to explain the discrepancy between EPA findings and her report, EXHIBIT 53. Dr. Kelly said the committee will find both reports prudent. Dr. Kelly read a January 22, 1993 memo from Richard Guymond to Carol Browner, EPA Administrator, explaining the risk assessment at East Liverpool. She also said indirect exposure routes are not likely to present significant additional risks from air emission sources and are highly dependent on site specific factors. Preliminary assessment by the Office of Research and Development (ORD) does show that risk from beef and milk consumption can be 1000 times higher near the facility than the risks from inhalation.

REP. HARPER asked if there was a difference between a cement plant and an incinerator. Dr. Kelly stated that the primary function of a hazardous waste incinerator is to destroy hazardous waste whereas the primary function of a cement kiln is to make cement which requires high temperatures. She said cement kilns, therefore, are very effective at destroying many types of hazardous waste.

REP. HARPER asked why incinerators are built if cement plants are as good as, or better than, incinerators at destroying toxic waste. Dr. Kelly noted that cement kilns currently burn about 24% of all hazardous waste generated in the United States. Some waste, such as waste with inorganic components, may be better managed at hazardous waste facilities.

REP. HARPER asked Dr. Eric Schneider, Livingston, to explain monitoring regulations in Montana. Dr. Schneider stated the present monitoring system is comparable to that of a fox guarding a chicken house: the list of toxic materials is long and are often unregulated.

REP. SWANSON asked Mr. Weiss for a further explanation of the composition of Holnam's waste stream (cement potliner, dry cleaning lint and filters), and if this waste stream will expand to include other wastes in the future. Mr. Weiss replied that he did not want to minimize the toxicity of hazardous waste. He said potliner, dry cleaning filters and lint produce fuel, but are all hazardous wastes. Potliner is generated in Montana and will supply the Columbia Falls fuel request. Refinery waste is essentially composed of sludges. The solid waste from dry cleaners is a hazardous waste due to its solvent components. He noted that Holnam wants to continue using fuel substitutes that are not based on arbitrary findings.

REP. SWANSON asked Dr. Kelly to explain the process that proves safety prior to burning hazardous fuel. She questioned the need for a siting act if there are already permit requirements. Dr. Kelly replied that an incinerator or a cement kiln plant can show

the siting commission or state health authorities that toxic waste can be burned safely. If the agency agrees, a variance is granted from the siting criteria allowing them to site within the proposed burning distance. She said that EPA's criteria is so stringent that the actual burning subsequently shows less risk than is estimated on paper. Dr. Kelly also said she has never seen a report on proposed toxic burning where the subsequent risk is lower than the estimated risk. She stated that data regarding cement kiln burning has already been conducted years previous, therefore, risk assessments do not need to be done.

REP. RANEY asked Ms. Lefohn if she was aware of the hazardous waste situations in Midlothian, Texas and East Liverpool, Ohio. Ms Lefohn stated that testimony from her husband, Dr. Lefohn, EXHIBIT 10, noted that reports regarding hazardous waste burning in East Liverpool and Midlothian were inadequate and conclusions could not be drawn.

Informational Testimony:

Mr. and Mrs. Charles Atkins submitted testimony thanking the committee for a fair hearing on SB 338.

Closing by Sponsor:

SEN. YELLOWTAIL said SB 338 represented the classic debate in public policy making: professionals vs. Montana citizens. He said Montanans need to ask themselves if they are persuaded beyond a reasonable doubt that the incineration of hazardous waste is safe. The toxic burning industry wants to import about 60,000 tons of waste to Montana.

SEN. YELLOWTAIL said that in a seven-month period, January 1992, to July 1992, the Holnam Holly Hills Plant filed 58 notices of excess emissions. He noted that in August 1989, the Arkansas Ashgrove Plant was fined \$37,000 for nine excess emissions violations on both the state and federal level.

SEN. YELLOWTAIL said he regretted that honest working people, employed in these plants, have been brought in to testify as pawns. SB 338 is not a jobs bill, he said. ("We don't have to take your crap, buddy"...).

CHAIRMAN KNOX said, "Let the Senator speak and give him the respect he is due". ("Give us rebuttal, then...when do we close?").

"Let's call for order here", CHAIRMAN KNOX said. "This hearing has had due process. We're following a very established pattern and the Senator is due the respect of an uninterrupted closing."

SEN. YELLOWTAIL said unfounded fears have been generated in the hearing. These plants are in a competitive situation but we are not in competition with a cement plant in South Dakota that burns



hazardous waste, he noted. SEN. YELLOWTAIL questioned what would happen with hazardous waste that goes up the stack, is not consumed, and is trapped during a thermal conversion. EXHIBIT 66 A reporter from a state newspaper contacted legislators in November for their individual opinion on issues facing the session, SEN. YELLOWTAIL said. In this interview, 79 of the 100 people elected to the House and 40 members of the 50-seat Senate said that the legislature should enact statewide limitations on the locations of hazardous material incinerators.

"We are charged with establishing public health and safety in this state," SEN. YELLOWTAIL said. "The committee was right in saying they should honor the public will...there is clearly enormous doubt as to the safety of these incinerators and it certainly is the public will that not be carried on in Montana," he concluded.

#### HEARING ON SB 72

##### Opening Statement by Sponsor:

SEN. GERRY DEVLIN, SD 13, Terry, said SB 72 would grant permits to seed clouds over Montana. He stated amendments to the bill are proposed. EXHIBIT 67

##### Proponents' Testimony:

Jim Jensen, Montana Environmental Information Center (MEIC), said SB 72 ensures that people are involved in their government.

SEN. LARRY TVEIT, SD 11, Fairview, stated that the North Dakota Atmospheric Pressure Board (NDAPB) currently seeds clouds in five counties in North Dakota. In 1990 and 1991, the DNRC denied NDAPB authority to continue to seed clouds in those counties bordering North Dakota, however, in 1992 the ruling was overturned in district court. SB 72 will require an Environmental Impact Statement to determine if Montana is being affected by the seeding. SEN. TVEIT distributed a pamphlet, "The Rain Making Myth." EXHIBIT 68. A barley crop production report from State Farm Fire and Casualty Company, Rain & Hail Insurance Service, Inc. was also submitted as testimony EXHIBIT 69 and a 1988 Disaster Program work sheet from Timothy J. Klasna, Lambert, insured. EXHIBIT 70

Mark Simonich, Director, Department of Natural Resources and Conservation (DNRC), said the department would support the proposed amendment.

Don MacIntyre, DNRC, legal counsel, emphasized that the EIS will make necessary scientific determinations regarding cloud seeding.

Jamie Doggett, Montana Cattlewomen, testified on behalf of eastern Montana cattlemen.

Bernard Peas, Lambert, member of the Organic Crop Association, said he did not want rainfall in Montana reduced. EXHIBIT 71

Doris Waller, Circle rancher, urged passage of SB 72 but requested a change in Section I, paragraph 2. EXHIBITS 72 and 73

Helen Waller, who resides within 100 miles of the North Dakota border, supported SB 72.

Tom Brutback said the EIS was necessary to provide data on cloud seeding.

REP. BILL REHBEIN, HD 21, Lambert, said he supported the bill.

Opponents' Testimony:

Testimony was submitted on behalf of Julius Honeyman, Regent, North Dakota, by Joe Steinbeisser, Jr. EXHIBIT 74

A recall petition for the abolition of the Slope County, North Dakota Weather Modification Authority was submitted. EXHIBIT 75

Jay Sandstrom, President, North Dakota Weather Modification Association, opposed SB 72. EXHIBIT 76

Melvin Leland, Sidney, submitted testimony opposing the issuance of a cloud seeding permit as requested in SB 72. EXHIBIT 77

Questions From Committee Members and Responses:

REP. TOOLE asked Mr. MacIntyre what the procedure would be if North Dakota would not submit to an EIS. Mr. MacIntyre stated that if Montana requested compliance, North Dakota would have to conform.

REP. TOOLE asked Mr. MacIntyre if North Dakota was fully aware of SB 72 legislation. Mr. MacIntyre responded, yes, North Dakota was involved in the legislation.

Mr. Simonich noted that a North Dakota engineer was following through on SB 72 to determine how an EIS would be beneficial.

REP. WAGNER asked Mr. MacIntyre to verify the life expectancy of an application. Mr. MacIntyre said the applications would be reviewed on an annual basis but in some cases, the permit could be for a longer period of time.

Closing by Sponsor:

SEN. DEVLIN said that not all counties in eastern Montana have opted for a weather modification plan. He informed the committee SB 72 had passed the Senate unanimously.

HEARING ON SB 196

Opening Statement by Sponsor:

SEN. GERRY DEVLIN, SD 13, Terry, stated SB 196 addresses the removal of 1,100 gallon underground storage tanks to alleviate leakage. EXHIBIT 78

Proponents' Testimony:

SEN. LARRY TVEIT, SD 11, Fairview, noted that if a farmer/rancher wants the tanks removed, SB 196 provides a window of opportunity.

REP. BILL REHBEIN, HD 21, Lambert, stated that if these tanks are not removed, they will deteriorate and contaminate ground water.

Lance Clark, Montana Association of Realtors, noted that it was a good idea that tank owners do not need a license to remove the tanks.

Tom Burpa, Circle, member of the Circle Airport Board, reported that the board paid \$1,500 in permits last year plus offered time to remove the tanks.

Gordon Darlenton, Three Forks, submitted written testimony.  
EXHIBIT 79

Opponents' Testimony:

Brian McNitt, Montana Environmental Information Center (MEIC), said MEIC strongly opposed SB 196 which was discussed two years and continues to be a bad idea. Small, as well as large tanks, can contaminate water, he said. SB 196 allows people too much time to remove tanks without checking on their releases.

Vivian Drake, Lewis & Clark Health Department, Water Quality Protection, submitted opposition testimony. EXHIBIT 80

Don Drake, chemical engineer, stated his opposition to SB 196, and said there could be substantial risk to health and the environment through explosion and fragmentation.

Dave Ross, Audubon Legislative Fund, said SB 196 takes the tank situation too lightly. He indicated smaller underground storage tank damage of about \$30,000 was reported last year.

Peter Nielsen, Missoula County Environmental Health Division supervisor, said the department was concerned about the passage of 196 and the subsequent effects on groundwater. EXHIBIT 81

Jean Riley, Executive Director, Petroleum Tank Release Compensation Board, testified in opposition to the bill as amended. EXHIBIT 82

Rebecca J. Dupuis, R.S., Lake County Land Services, Polson, submitted testimony opposing the bill. EXHIBIT 83

Informational Testimony:

John Geach, DHES, UST, told the committee he was neither an opponent nor proponent but suggested the committee read EXHIBIT 84 and make their own decisions. He noted there are presently about 1,400 underground storage tanks under 1000 gallons that leak.

Questions From Committee Members and Responses:

REP. FELAND asked Mr. McNitt if it wasn't better to remove the tanks from the ground now. Mr. McNitt said the leak detection factor as described in SB 196 is a problem.

REP. FELAND said it was better to give tank owners the chance to remove the tanks themselves. He asked what the procedure would be for those who cannot afford to remove the tanks. Mr. McNitt stated that if the bill passes as written, there would not be an opportunity for cleanup.

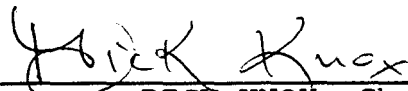
REP. STOVALL asked Mr. McNitt if the tank owner removed his tank properly would he be guaranteed compensation. Mr. Geach replied that if the owner complies with compensation board regulations, and still has a release, they are eligible for reimbursement of necessary costs.

Closing by Sponsor:

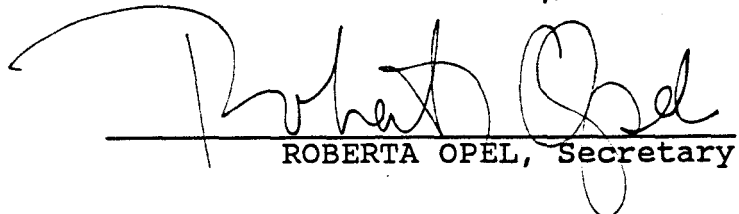
SEN. DEVLIN said the bill requires notification if there is a leak. He stated that although many states do not deal with 1,100 gallon tanks, it is important to remove them before they leak.

ADJOURNMENT

Adjournment: 8:45 p.m.



DICK KNOX, Chairman



ROBERTA OPEL, Secretary

DK/ro

Natural Resources COMMITTEE

## ROLL CALL

DATE \_\_\_\_\_

$$\begin{array}{r|l} 3 & 1792 \end{array}$$
[illegible]

UTAH DEC

EXHIBIT 1  
DATE 3-17-93  
SB 338

RESPONSE TO COMMENTS  
HAZARDOUS WASTE FACILITY SITING CRITERIA  
[R450-3-3.2(c)9, 3-23, 8-6.1(a)(3)]

Commentors generally expressed strong support for the implementation of siting criteria for hazardous waste treatment, storage, and disposal facilities. Many commentors thought that specific provisions of the siting criteria needed revision or clarification. Presented below are comments received in written form during the public comment period and as oral statements made at the public hearings. Comments were received from environmental groups, local and regional organizations, industry representatives, government officials, and many members of the general public.

Comments have been grouped according to criteria they regard. The item numbers given in the comments and responses reflect the numbering of the revised criteria.

Comment: Numerous comments were received regarding the prohibition against siting treatment, storage, and disposal (TSD) facilities within five miles of residences, schools, churches, etc., and various types of surface waters [R450-3-23 (b)(xii) and (xiii)]. Comments included setting no arbitrary distance, with the appropriate distance determined on the basis of site and local conditions, to suggested increases in the distance ranging from 10 to 50 miles. Most commentors who suggested increases based them on the need for greater protection from incinerator air emissions. It was also suggested that the criterion be limited to existing residences.

Response: The five mile distance was initially chosen as being adequate for protection from runoff, spills, fire, explosion, and ground and surface water contamination, as well as aesthetic considerations. It was also considered to provide a minimum buffer from air emissions. The Utah Air Conservation Committee requires by regulation that every new or modified emission source in the state uses the best available control technology (BACT) to control air emissions. This BACT determination is made on a case-by-case basis and includes, among other things, computer modeling which predicts pollutant concentrations by amount and distance from the source. If the modeling predicts concentrations of any pollutant that would endanger the environment or public health, an approval order could not be issued. The Bureau of Air Quality (BAQ) has commented that, in general, no health impact would be expected to occur beyond the five miles proposed in the siting criteria. However, if a greater distance is necessary, the BAQ is not bound by the five mile rule or any other siting criteria that would conflict with their permitting procedures. The word "existing" has been added to the criterion regarding residences.

Comment: Clarify or further define the phrase "significant ephemeral stream" [R450-3-23 (b)(1)(xiii)].

Response: The phrase "significant ephemeral stream" has been changed to "intermittent stream" which implies the presence of water on a



# State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY  
DIVISION OF SOLID AND HAZARDOUS WASTE

Michael O. Leavitt  
Governor

Dianne R. Nielson Ph.D.  
Executive Director

Dennis R. Downs  
Director

288 North 1460 West  
P.O. Box 144880  
Salt Lake City, Utah 84114-4880  
(801) 538-6170  
(801) 538-6715 Fax  
(801) 536-2073 T.D.D.

January 5, 1993

Sarah Barnard  
P.O. Box 1082  
Bozeman, MT 59771

Dear Ms. Barnard:

We are in receipt of your letter of December 21, 1992 regarding Utah's commercial hazardous waste siting criteria. Your questions are presented as in the letter followed by our response to each of the questions.

*1) In a 1/26/92 article in the Bozeman Chronicle, Roger Dilts, an environmental scientist for the Utah DEQ was interviewed. He acknowledges the 5 mile distance requirement was not approved after long and costly scientific study, but came from common sense. What was the reasoning behind the distances?*

In May 1987, A Hazardous Waste Facility Siting Task Force was created by Governor Bangerter that recommended, among other things, the establishment of siting criteria to be considered as part of the permitting process for hazardous waste facilities. In early 1988, the Utah legislature enacted Senate Bill 29, which amended the Utah Solid and Hazardous Waste Act and gave authority to the Utah Solid and Hazardous Waste Committee (now the Utah Solid and Hazardous Waste Control Board) to establish siting criteria. Division staff undertook formulation of such criteria. In October 1988, the legislature placed a moratorium on construction of new hazardous waste facilities until the criteria were finalized. The process of formulating the criteria included a series of scoping meetings held around the state of Utah during June 1988. Proposed criteria were drafted and published and public hearings were held November 1 to 3, 1988 to receive comments relative to the proposed criteria.

There were several comments regarding the "five mile" criteria and the basis for the criteria. Enclosed is the response prepared by the Division in its "Response to Comments" document following the public comment period for the siting criteria.

Testimony of Sarah Barnard before the Montana House Natural Resources Committee

Chairman Knox, members of the committee, thank you for hearing us today. SB 338 is a simple siting bill. It applies to large commercial incineration facilities that receive dangerous wastes from offsite. It does not include hospitals and medical facilities or oil refineries. Dangerous wastes are wastes which are defined as hazardous and infectious, wastes regulated under the federal Toxic Substances Control Act, and wastes that contain two parts per million or more PCB. Excluded from the definition are domestic sewage, household refuse, and dangerous wastes used for testing purposes.

Under this bill commercial dangerous waste incinerators are prohibited from being located within:

- 3 miles of existing permanent dwellings and public gathering places
- 3 miles of surface waters, including perennial and intermittent streams, lakes, wetlands
- areas directly above unconfined aquifers - where water on the surface, from precipitation, does seep into the aquifer - containing a TDS content of less than 500mg/l - this is very good quality water
- farmlands classified as prime, unique or of statewide importance
- 100 year floodplains
- 200 ft of Holocene fault lines - these are faults considered active
- dam failure flood areas
- parks and recreation areas
- an area where local weather conditions create a risk to public health - such as air inversions
- an area where the facility does not comply with local zoning regulations

This is lean government. The fiscal note is zero. The siting criteria will be added to the rest of the requirements a permit applicant must meet to be issued a permit. There is nothing new here. The "dangerous waste" designation is from a Washington state model. Many states have location standards, some stricter some not as strict as these. Wyoming is drafting theirs now, with a five mile distance from dwellings. Utah supplied the basis for these criteria, and then the Utah standards were modified to make them less stringent, more appropriate for Montana.

Opponents will tell you that the criteria are unscientific. Last Fall I phoned the EQC and the DHES and asked if there was a scientific rationale behind siting distances. Not that they knew of. So I called Utah and explained that the Holnam representatives were challenging the setback distances in the Gallatin County draft Land Use Plan as being unscientific. I spoke to a Legislative Analyst for the state who said, "the cement companies are choosing what to be scientific about". He also argued - "Everything doesn't have to be scientific. It's public policy. If you don't want it there you don't want it there."

While we're on the topic of what's scientific... Opponents of this bill have consistently accused the proponents of not making decisions based on science. An EPA combustion chief recently said of the risk analysis process: "It's no longer science; it's purely art. It's unbelievable how many assumptions you have to make."

You have a document from Utah which explains their siting distances. "The five mile distance was initially chosen as being adequate for protection from runoff, spills, fire, explosion, and ground and surface water contamination, as well as aesthetic considerations. It was also considered to provide a minimum buffer from air emissions." Hazardous waste facilities have been sited in Utah under these criteria. Cement kilns proposing to burn hazardous wastes in Utah must meet the siting standards. Utah doesn't ever expect their cement plants to burn hazardous wastes because of plant locations, and cement continues to be produced in the state. Ash Grove and Holnam facilities in other western states - Utah, Colorado, South Dakota - whose proposals to burn hazardous wastes were denied continue to make cement. The Montana City and Holnam plants are assets to the communities now, we want them to continue to be assets.

Opponents will tell you this bill is a ban. It's not. We've identified at least 11 counties in Montana where dangerous waste incinerators can be sited under these standards. And that is an extremely conservative estimate, because it's based on groundwater protection far beyond what is



Opponents will tell you that if the facilities's proposals are not allowed to proceed Montana might get thrown out of the Western States Agreement. No. A 1992 National Governors Association report on the Capacity Assurance Process shows that 70% of all hazardous waste management capacity nationwide is unused. There is also excess capacity in the Western Region. Montana's Capacity Assurance Plan concludes "the projected regional demand for hazardous waste management capacity has been or is being met." Montana does not have to commit itself to the cement kiln incineration of hazardous wastes to fulfill our part in the Western States Agreement; there are many other ways we can manage our wastes to provide capacity assurance and we have the time to look at long term solutions. Montana's exportation of hazardous waste, at 7,200 tons in 1991, is viewed as "minimal". Montana's standing in the region and in the CAP process has become an issue because cement company PR men have made it one.

One thing we can be sure of - any commercial dangerous waste incinerator sited in Montana will be a large importer of wastes. Holnam proposes to burn approximately 45,000 tons of hazardous wastes a year, Ash Grove 15,000 tons. Less than 7,200 tons of the waste could be contributed by Montana. Montana generates only 10% of the capacity of medical wastes proposed to be burned by Alcotech at Ringling.

But this bill is about siting. Other states have siting criteria, some stricter, some not as strict as those in SB 338. Siting provides an initial hurdle for companies who want to compete for big profits in the race to incinerate dangerous wastes in our state. Please take positive action on SB 338.

UTAH DEC

EXHIBIT 1  
DATE 3-17-93  
\$B 338

RESPONSE TO COMMENTS  
HAZARDOUS WASTE FACILITY SITING CRITERIA  
[R450-3-3.2(c)9, 3-23, 8-6.1(a)(3)]

Commentors generally expressed strong support for the implementation of siting criteria for hazardous waste treatment, storage, and disposal facilities. Many commentors thought that specific provisions of the siting criteria needed revision or clarification. Presented below are comments received in written form during the public comment period and as oral statements made at the public hearings. Comments were received from environmental groups, local and regional organizations, industry representatives, government officials, and many members of the general public.

Comments have been grouped according to criteria they regard. The item numbers given in the comments and responses reflect the numbering of the revised criteria.

Comment: Numerous comments were received regarding the prohibition against siting treatment, storage, and disposal (TSD) facilities within five miles of residences, schools, churches, etc., and various types of surface waters [R450-3-23 (b)(xii) and (xiii)]. Comments included setting no arbitrary distance, with the appropriate distance determined on the basis of site and local conditions, to suggested increases in the distance ranging from 10 to 50 miles. Most commentors who suggested increases based them on the need for greater protection from incinerator air emissions. It was also suggested that the criterion be limited to existing residences.

Response: The five mile distance was initially chosen as being adequate for protection from runoff, spills, fire, explosion, and ground and surface water contamination, as well as aesthetic considerations. It was also considered to provide a minimum buffer from air emissions. The Utah Air Conservation Committee requires by regulation that every new or modified emission source in the state uses the best available control technology (BACT) to control air emissions. This BACT determination is made on a case-by-case basis and includes, among other things, computer modeling which predicts pollutant concentrations by amount and distance from the source. If the modeling predicts concentrations of any pollutant that would endanger the environment or public health, an approval order could not be issued. The Bureau of Air Quality (BAQ) has commented that, in general, no health impact would be expected to occur beyond the five miles proposed in the siting criteria. However, if a greater distance is necessary, the BAQ is not bound by the five mile rule or any other siting criteria that would conflict with their permitting procedures. The word "existing" has been added to the criterion regarding residences.

Comment: Clarify or further define the phrase "significant ephemeral stream" [R450-3-23 (b)(1)(xiii)].

Response: The phrase "significant ephemeral stream" has been changed to "intermittent stream" which implies the presence of water on a

March 17, 1993

EXHIBIT 2  
DATE 3-17-93  
SB HB 338

Chairman Knox and members of the Committee:

My name is Steve Gipe. I have lived and practiced emergency medicine in Bozeman since 1984. I represent the vast majority of physicians in Gallatin County. I am here to ask for your support of SB 338.

Over the past 18 months, I, like many others, have become involved in the issue of burning dangerous wastes and the impact on our health and environment. Please let me reassure you that we are not a bunch of emotional extremists or "lay" people who lack the ability to understand and form intelligent opinions about the issues of hazardous waste burning. The supporters of this bill represent a true cross section of the finest citizens in Montana. From chemists and chemical engineers, to county and city officials, to highly intelligent and concerned parents, to physicians, farmers, and business people, I believe we truly represent the majority of Montanans. ALL HAVE VOLUNTEERED, and many have sacrificed most of their time between raising families and earning a living this past year to bring this bill before you today.

The limited scientific evidence on the safety of burning dangerous waste is highly controversial at best. The EPA has admitted an unknown risk to health, perhaps compounded hundreds of times by indirect exposure through bio-accumulation. To quote EPA Chief of Combustion Robert Holloway concerning the analysis of health risk to toxic burning exposure, I quote, "It's no longer science, it's purely art. It's unbelievable how many assumptions you have to make."

The cement industry has repeatedly claimed they can burn hazardous waste with complete safety and no threat to public health, regardless of location. I hope this assertion raises a red flag with you, as it does with me. This has not and cannot be scientifically proven. I have read disturbing letters and accounts of people living near cement kilns which are burning hazardous waste in such states as Texas and California. The recurring health problems include headaches, respiratory problems, skin rashes, reproductive problems including increased incidence of spontaneous abortion, endocrine disorders, and possibly increased rates of cancer, especially leukemia, which could take several decades to study the epidemiology. Similar problems have been reported in livestock, especially horses. Many people, including some physicians and veterinarians, feel this is related to acute and chronic toxic exposure from plant emissions.

Burning hazardous waste releases unknown quantities of unknown chemicals. There is no way to identify or accurately monitor everything that is released into the air through stack emissions. Heavy metals will not be destroyed by incineration, but will be redistributed in our environment and in the material we use to build our homes. There are NO SAFE levels of exposure to heavy metals or potent carcinogens such as dioxins. These compounds stay in our environment for generations and bio-accumulate. There is no acceptable level of exposure.

As public servants, I as a physician and you as legislators, have the privileged responsibility to make decisions in the best interest of the people we serve. I believe this bill provides a level of insurance and a buffer zone which the people of Montana want and deserve. It is conservative and makes common sense. What is more important than our health and our environment? Please support

March 17, 1993

EXHIBIT 3

DATE 3-17-93

SB 338

MY NAME IS JACKIE FORBA AND I LIVE WITH MY FAMILY IN MONTANA CITY. I ADDRESS YOU TODAY NOT TO GIVE YOU ADDITIONAL SCIENTIFIC INFORMATION OR RESEARCH DATA. YOU HAVE AVAILABLE VOLUMES OF SUCH INFORMATION AND MANY SCIENTISTS AND ENGINEERS WHO CAN ABLY ADDRESS THOSE ISSUES. I NEED TO TALK TO YOU ABOUT THE ASSUMPTION OF RISKS.

MANY GREAT ADVANCES AND DISCOVERIES HAVE BEEN MADE IN THE LAST 50 YEARS BECAUSE PEOPLE WERE WILLING TO TAKE RISKS AND EXPERIMENT WITH NEW TECHNOLOGY. WE HAVE ALSO MADE HORRENDOUS MISTAKES WHICH HAVE HAD LONG-TERM, FAR-REACHING CONSEQUENCE ASBESTOS, LEAD BASED PAINT, DDT, "AGENT ORANGE", ETC. THINGS WHICH APPEARED TO BE SAFE AND RISK-FREE BUT WILL AFFECT US AND OUR CHILDREN FOR MANY YEARS TO COME.

WE CAN NO LONGER LOOK JUST TO THE SHORT TERM EFFECTS OF THE PRODUCTS WE USE AND THE ACTIVITIES IN WHICH WE ENGAGE. WE MUST LEARN FROM OUR MISTAKES. WE MUST DO EVERYTHING WE CAN TO MINIMIZE OUR RISKS.

OUR STATE NEEDS A COMPREHENSIVE PLAN TO DEAL WITH THE ISSUE OF THE HAZARDOUS WASTES WE GENERATE. THE DEVELOPMENT OF SUCH A PLAN IS THE RESPONSIBILITY OF THE LEGISLATURE AND THE APPROPRIATE STATE AGENCIES WITH THE INPUT OF THE PUBLIC. THE INTENT OF SB338 IS NOT TO OFFER SUCH A PLAN. THE INTENT OF SB338 IS TO ESTABLISH THE **LOCATION** OF DANGEROUS WASTE INCINERATION IF INCINERATION IS DEEMED TO BE A PART OF THE COMPREHENSIVE PLAN FOR OUR STATE. WE ALL AGREE THAT UNREGULATED LANDFILLING OF HAZARDOUS WASTES POSES A GREAT DANGER TO OUR STATE AND OUR CITIZENS. THE INCINERATION OF HAZARDOUS WASTES APPEARS TO MANY TO BE A QUICK AND EASY SOLUTION TO OUR PROBLEM. BEWARE OF QUICK AND EASY SOLUTIONS! RATHER, REMEMBER THE MISTAKES OF THE PAST AND USE CRITICAL THINKING TO ADDRESS ALL ASPECTS OF THIS ISSUE.

WHAT I AM SAYING, AND WHAT THE INDIVIDUALS THROUGHOUT THIS STATE WHO RISE TO SUPPORT SB 338 ARE SAYING VERY CLEARLY TO YOU IS THAT WE ARE NOT WILLING TO ASSUME THE RISKS OF BURNING DANGEROUS WASTES LESS THAN THREE MILES FROM OUR HOMES, SCHOOLS, AND OPEN WATER. OUR HEALTH, OUR ENVIRONMENT, OUR ECONOMY AND THE BUSINESS CLIMATE OF OUR COMMUNITIES ARE TOO MUCH TO RISK SO THAT A FEW COMPANIES CAN INCINERATE DANGEROUS WASTES WHEREVER THEY CHOOSE.

THANK YOU FOR YOUR CRITICAL EXAMINATION OF THIS ISSUE. I STRONGLY URGE YOU TO SUPPORT THE DANGEROUS WASTE FACILITY SITING ACT.

Sincerely,  
Jackie Forba

The following physicians and surgeons of Helena support Senate Bill 338, The Dangerous Waste Incineration Facility Siting Act, to protect both the environment and the public health.

Charles Anderson, M.D.  
Bill Austin, M.D.  
Stephen Behlmer M.D.  
Bruce Bellin M.D.  
Don Bishop M.D.  
Earl Book M.D.  
Stephen Cade M.D.  
Kenneth Carpenter M.D.  
Louis Cotterell M.D.  
James Crichton M.D.  
Nancy Ames-Curtis M.D.  
Paul Donaldson M.D.  
Kenneth Eden M.D.  
Harry Etter M.D.  
Alan Flynn M.D.  
G.B. Givler D.D.S.  
Jeffrey Goldes M.D.  
Mary Ann Guggenheim M.D.  
Elizabeth Gundersen M.D.  
Harris Hanson M.D.  
William Harper M.D.  
V. Lee Harrison M.D.  
Dwight Hiesterman M.D.  
Michael Hixon M.D.  
Richard Hopkins M.D.  
James Hoyne M.D.  
Brooke Hunter M.D.  
Pietro James M.D.  
David Jordan M.D.

Jean Justad, M.D.  
Robert Kechely M.D.  
Peter Kozisek M.D.  
Doug Kuntzweiler M.D.  
Jay Larson M.D.  
Don Lasselle M.D.  
Raymond Lee M.D.  
Dawson List M.D.  
James Maher M.D.  
Larry McEvoy M.D.  
Loren McKerrow M.D.  
Jack McMahon Jr. M.D.  
Adron Medley M.D.  
Lorette Meske M.D.  
James Nickel M.D.  
Richard O'Connor M.D.  
Fred Olson M.D.  
Dennis Palmer M.D.  
Richard Paustian M.D.  
Jack Reynolds M.D.  
Joseph Rizza M.D.  
Richard Shepard M.D.  
Michael Strekall M.D.  
George Teter M.D.  
Vern Tolstedt M.D.  
Allen Weinert M.D.  
Kurt Werner M.D.  
John Wetherby M.D.  
Bernard Winer M.D.

EXHIBIT

49

DATE 3-17-93

~~SB~~ HB 338

HOUSE OF REPRESENTATIVES

Conservation of Natural Resources COMMITTEE

WITNESS STATEMENT

PLEASE PRINT

NAME JACKIE FOEBA BILL NO. 338

ADDRESS Star Route Box 180 Clancy DATE 3-17-93

WHOM DO YOU REPRESENT? Self + Family

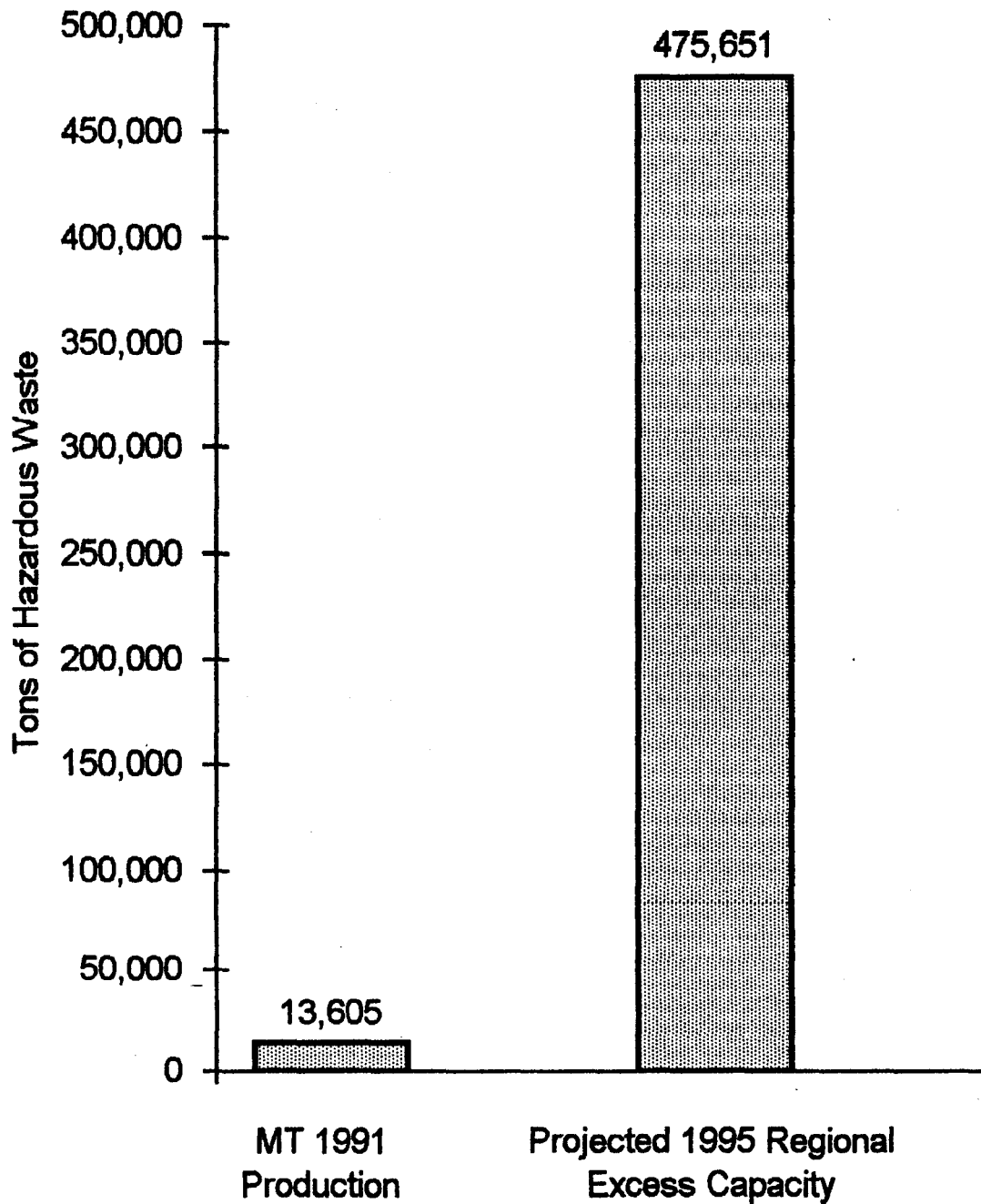
SUPPORT ☒ OPPOSE ☐ AMEND ☐

COMMENTS: written testimony submitted

for self, James Wayne, M.D.

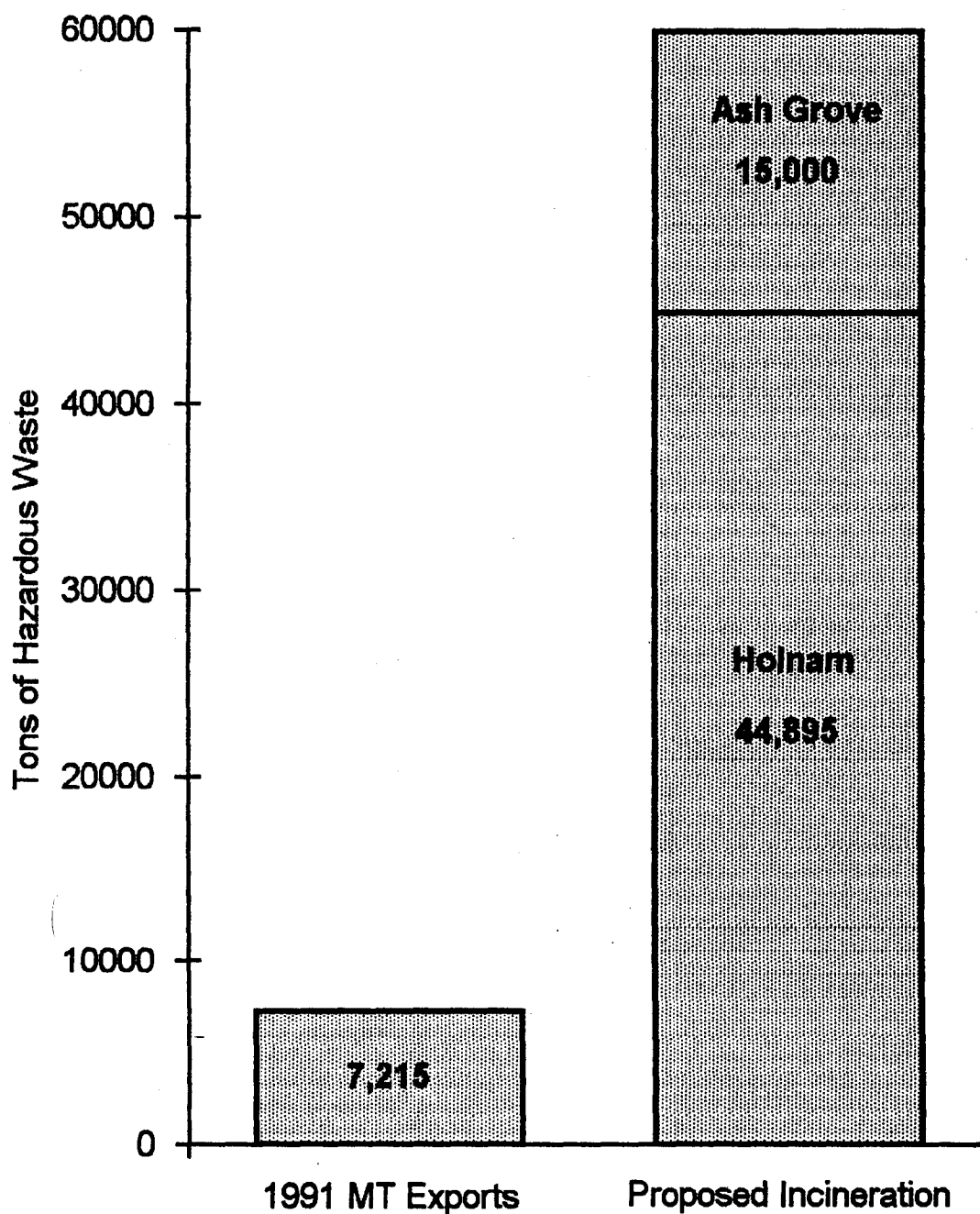
and 58 Helena area physicians  
and surgeons who support SB338

Volume of hazardous waste (tons) produced in Montana for 1991, and regional excess capacity for hazardous waste incineration projected for 1995.



Source: MT data is from the MT Dept. of Health and Environmental Sciences. Projected excess capacity is from the 1992 Regional Capacity Assurance Submission; the value presented is the combined total of two SARA Management Categories, i) Incineration (Sludge/Solid) and ii) Energy Recovery.

Volumes of hazardous waste (tons) exported from Montana in 1991 and proposed for incineration by Ash Grove and Holnam, Inc.



Source: MT Dept. of Health and Environmental Sciences.



EXHIBIT 6

DATE 3-17-93

SB HB 338

Mr. Chairman and Committee Members -

My name is Ken Jacobs. I own and operate Jacobs Western Land Brokerage in Bozeman. We specialize in Farms, Ranches and large Recreation properties.

I became interested in waste disposal and particularly in the burning of Hazardous and Toxic Waste several weeks ago when I received calls and letters from clients with deep concern about the fact that Montana was considering the incineration of waste from other states.

I was told by clients looking for ranch and recreation property to just draw a 20 mile circle around each of the proposed incineration sites and don't present them with any property that is located in that area.

These were people who had first hand experience with the burning of waste in other parts of the country and want nothing to do with another area that would permit such a thing to happen.

Frankly, I thought they were being a little overly emotional about the whole thing and I told them so but I also made a number of calls around the country and was deluged with hundreds of pages of newspaper clippings, magazine articles and studies done by numerous organizations from all over the world. I have spent a great deal of time reading and analyzing this material and I have come to the following conclusions:

1. There isn't now, nor ever has been anywhere in the world, a cement plant that can guarantee that the burning of toxic and hazardous waste will not present a health hazard in a large area surrounding the incinerator.
2. Just the threat of burning waste is now affecting the value of real estate for many miles around the Trident plant. Our office, which is just one of many in the Gallatin valley, has two large transactions which have been written to close contingent upon the Trident facility not being allowed to burn waste.

Of course, this impact on real estate values will intensify if it is announced that a permit to burn is, in fact, ever granted. Studies show that people move away from the source of pollution and other people refuse to move into the area.

3. That agriculture can and will be effected both in meat and in milk. The dairymen in the area are, and should be, very concerned.
4. That the tourist industry, which is one of the real bright spots in the state's economy, will be impacted, not just by the inevitable pollution, but maybe more importantly, by the public's perception that Montana's pristine environment will be seriously damaged by burning waste materials shipped into the state from all parts of the country.
5. The regulation, monitoring and cleanup of other waste incinerator materials has proven very costly, that for every dollar that our state receives in the short term, we will lose \$10.00 in the long term.
6. Montana led the nation last year in the appreciation of land values. We are expected to remain in the top 5 states for land value appreciation for several more years. The construction boom in parts of our state is being fueled by money moving into our state. These are the very people who will be most sensitive to toxic burning. The cessation of this construction would mean jobs and the erosion of an important tax base.

Anyone who feels that an industry based on the disposal of other states' toxic waste materials could be good for Montana, either hasn't done their homework, or they have an agenda that does not include the health and welfare of this state's citizens.

Common sense tells us that if burning of any kind of waste materials was safe, the states that are going to be so good as to send us all this free fuel would burn it where it is generated. If it was safe, would they pay transportation specialists to pick it up and haul it 1,000 miles or more to an incinerator and then pay a foreign corporation big money to burn it?

We, the people of Montana, have a responsibility to dispose of our own waste, but we shouldn't allow even 1 pound of toxic waste into our state for disposal purposes and the very least we can do is to support S.B. 338 so we have a mechanism to determine where the disposal of waste will take place and where it will do the least damage.

The State of Missouri has an incinerator on the banks of the Mississippi River at Festus, Missouri. This was touted by the industry as the state of the arts facility and perfectly safe. It is now considered to be among the worst polluters in the country.

Ohio allowed a state of the arts incinerator to be placed on the Ohio River against huge opposition from the public. But big money and a concentrated lobbying effort won out over the citizens in the area. That facility has been in violation of basic rules for contamination many times since it was started up. That facility is sited much like the one in Trident.

I want to close by reading you quotes from E.P.A. executives:

1. "This incinerator has nothing to do with protecting the environment. It has nothing to do with providing jobs. It has nothing to do with promoting industrial growth. It's only about poisoning for profit." - - - Bill Sanjour, US EPA
2. "No hazardous waste facility of any kind should be sited in this location immediately upon the banks of the Ohio River, which provides drinking water to millions. any accident, any release, any illegal conduct will directly imperil the health of millions." - - - Richard Sahli, former Deputy Director of OEPA, 10/1/91.
3. "You can make no health or safety claims for the WTI incinerator based on its compliance with EPA regulations because you just don't know the full range of compounds that will be coming out of its stack . . . Operating hazardous waste incinerators in this country have all had major environmental problems and those in turn create financial problems in the form of diminished property values and health risks." - - - Hugh B. Kaufman, US EPA, January 17, 1991.

EXHIBIT 6  
DATE 3-17-93  
SB 338

4. The passage of SB-338 will not answer all questions nor will it solve all problems. But, at least, the leaders of our state will have a tool by which to control and regulate what has proven to be a huge and very expensive problem across our country.

I strongly urge you to support SB 338.

# Northern Plains Resource Council 7

EXHIBIT

DATE 3-17-93

March 17, 1993

SB-HB 338

## Mega-Incinerator Proposed for McCone County

McCone County and the Circle Chamber of Commerce have established a "Solid Waste Conversion Committee" to consider a massive-scale municipal waste incineration proposal for the Circle, Montana area. A recent letter sent by the committee to county residents describes the proposal in detail:

A rotary-kiln incinerator would burn 2400 tons of municipal waste per day - **876,000 tons per year** - over four times the minimum volume of a megalandfill.

The vast majority of this waste would be imported from out-of-state.

Although the project would be initially permitted as a municipal waste incinerator, the committee suggests that medical waste and fly ash incineration may be considered in the future.

Waste residue from the incinerator would be converted to road aggregate, 30% of which could be sold to the government under current recycling rules.

The project is being proposed by a Lambert, Montana business person "who currently owns an environmental business".

## McCone Agricultural Protection Organization Supports SB 338

Members of the McCone Agricultural Protection Organization (MAPO), an affiliate of the Northern Plains Resource Council (NPRC), has serious concerns about this incineration proposal:

- \* If this facility may be adapted to burn medical waste and fly ash, what guarantee is there that other dangerous waste will not be burned at some time in the future?
- \* Can the safety of this facility really be scientifically proved?
- \* How can the health of our families and the protection of the agricultural base of our community be ensured?
- \* How will local property values be affected?

MAPO and NPRC strongly support SB 338 because we believe that many - *if not all* - of these questions are unanswerable. Existing scientific information is far too inconclusive to ensure the safety of such a facility, and in fact, much available scientific information strongly suggests that incinerators may pose serious threats of toxic contamination.

***We do not want this facility sited near our homes or the agricultural land that our economy depends on!***

We believe enactment of SB 338 is necessary to safeguard the health of our families, the agricultural products we produce and the economies of our communities. No dangerous waste incinerator should be sited in a location where grave and irreversible damage would result from dioxin, heavy metal or other chemical contamination.

**PLEASE VOTE YES ON SB 338!**

# Northern Plains Resource Council

Testimony of Jerry Sikorski on behalf of  
Citizens For The Health Of Our Children  
and  
The Northern Plains Resource Council  
SB 338

March 17, 1993

Mr. Chairman and members of the Committee,

I am a third generation farmer-rancher producing wheat and beef cattle on a family ranch 20 miles south of Baker, MT. I represent over 50 local citizens that are forming a group - affiliating with the Northern Plains Resource Council - to address our concerns.

I became involved with **dangerous waste problems** over a year ago when an incineration company began moving to Baker. After discovering the problems Washington and South Dakota had with irresponsible incineration, I and others researched the effects of incineration pollution on people and the environment. We found that:

- 1) Toxic chemicals (PCB's, Dioxins, Furans, etc.) tend to Bioaccumulate - meaning they increase as they go up the food chain (see attached research paper by Yvonne Greichs and Barbra A. Dohman). Bioaccumulation can have a significant effect on grain, hay, and livestock production. Montana, being dependant on Agriculture, can not afford to risk this major economic base.
- 2) When PCBs are incinerated dioxins and furans are emitted.
- 3) Dioxins are 1,000,000 times as toxic as PCBs
- 4) Dioxins are linked to cancer and birth defects.
- 5) The list of health risks goes on and on.

Senate Bill 338, while not perfect, can reduce some of the risk to ourselves and our children. **Why not** locate these facilities away from schools, residential areas, water supplies and valuable agricultural land. If we are to err, let us err on the conservative side.

I recently flew from Helena to Rapid City, S.D. I was amazed to see the Big Sky of Montana turn yellow at Colstrip and stay that way beyond Lemon S.D. In rural Montana we often take our clean air for granted, but on that flight I was graphically reminded of how easily air pollution can effect great areas and, potentially, great numbers of people. The proposed site for Ross Electric's incinerator **is less than two miles** from Baker. I believe we owe our grandchildren more than that. Please support SB 338. Thank you.

*Polychlorinated Biphenyl Contamination of Areas Surrounding  
Two Transformer Salvage Companies, Colman,  
South Dakota—September 1977<sup>1</sup>*

Yvonne A. Greichus<sup>2</sup> and Barbara A. Dobman<sup>3</sup>

~~Thomas~~

### ABSTRACT

Soil, corn plants, and foliage from areas surrounding two electrical salvage companies involved in reconditioning old transformers had unusually high levels of polychlorinated biphenyls (PCBs). Levels decreased as distance from the factories increased. PCBs were dispersed into the air through incineration of waste oils; water and soil contamination was caused by runoff from the factories. PCBs found in the contaminated areas closely resembled Aroclor 1260 as did the PCBs in the waste oil, whereas PCBs in other areas were more similar to Aroclor 1254. PCBs on surface soils taken from an unplowed pasture near the factories also resembled Aroclor 1260, whereas samples taken from depths of 2–4 inches showed degradation of some PCB isomers. PCB concentrations in corn cobs and kernels were < 0.03 ppm, whereas leaves contained PCB levels of up to 2.2 ppm. PCB levels in earthworms and small rodents collected near the factories were considerably higher than levels in the same types of animals collected from other areas.

### Introduction

Polychlorinated biphenyls (PCBs) have become significant environmental pollutants which are residual and toxic. Their accumulation in the food chains of many animals produces both acute and chronic effects on reproduction, growth, and behavior (J. 6, 8). PCBs have been used extensively in the past as a dielectric base for transformers and capacitors. Although PCBs are no longer manufactured in the United States, the U.S. Environmental Protection Agency (EPA) has estimated that, since their introduction in 1929, 1.25 billion pounds have been used. Of this amount, 60 percent is still in use and 44 percent has been destroyed. The rest remains in the environment (9). Movement of PCBs through the atmosphere has been demonstrated, and

industrial or metropolitan areas are the just sources of the PCB contamination (4, 7). Bailsch et al. (1) have shown that certain isomers of occurred in the environment in the same ratios as used in commercial PCB mixtures. Aroclors 125-1260. They have presented evidence that the deg tion of these isomers in the ecosphere, over 2 years, has been too small to produce observable cha Indicating that these isomers are extremely persi To further complicate matters, PCBs contain highly toxic polychlorinated dibenzofurans (10). clor 1254 and Aroclor 1260 contain 3.5 ppm and ppm, respectively, of a combination of the tetra-, pe and hexachlorinated dibenzofurans (5)

When the environment has been found to be contaminated with PCBs, several important questions must be considered. If possible, the source of the contaminant should be located; the method of dispersion into environment by air, water, soil, etc., needs to be ascertained; and the extent of the area of pollution must be determined. Whether the contamination is of recent and/or past origin, the potential harm to the environment due to accumulation in the food chain of animals should be studied. This paper discusses an incident in which PCBs entered the environment through activity of two transformer salvage companies, and it presents methods and supporting data for answering the above questions.

### Methods and Materials

During September 1977, two samples each of soil, corn leaves collected near two electrical salvage companies near Colman, South Dakota, were found to have unusually high levels of PCBs. Samples were collected in chemically cleaned glass jars or hexane-washed minimum soil and were frozen until being analyzed. Samples were extracted and subjected to Florisil column cleanup according to the method of Greichus et al. (1). Instrument parameters and operating conditions for chromatographic analysis were as follows:

<sup>1</sup> This paper is published with the approval of the Director of the South Dakota Agricultural Experiment Station as Journal Series Publication No. 1643.

<sup>2</sup> Present address: Biochemical Services Division, Rocky Mountain Geochemical Corp., Suite 303, 1400 33rd Street, Emeryville, Calif. 94608.

<sup>3</sup> Saxon Biochemistry Service, Chemistry Department, South Dakota State University, Brookings, S.D. 57007.

Column:

6-ft by 1/4-inch borosilicate glass, packed with 15 percent QF-1 silicone (Fluoro) or a 1:1 mixture of 15 percent QF-1 and 10 percent DC-200 silicone, both on 60-100-mesh Chromosorb W (HP), acid-washed and dimethylchlorosilane-treated  
Carrier gas: Nitrogen flowing at 40 ml. minute  
Temperatures: column 210°C  
injector 220°C  
detector 250°C = NL or 250°C = MH

was not sampled.

### Results and Discussion

Levels of PCBs as Aroclor 1260 on a ppm dry weight basis for the samples collected are shown in Figure 1. Highest PCB levels were found in the samples collected nearest to the factories; PCB levels became progressively lower as distance from the factories increased. An exception was soil samples taken from a drainage ditch to the west of the factory lot where levels reached 46 ppm in a low lying area.

Numerous soil, corn leaf, and foliage samples taken over a number of years from relatively uncontaminated areas of South Dakota have revealed a background level

Mean recovery of PCBs from fortified samples were 90 percent  $\pm$  5 percent standard deviation for all types of samples analyzed. Residue values were corrected for percent recovery. The earlier findings of PCBs in soil and corn leaves prompted the collection of soil, corn leaves, and foliage samples up to 0.25 mile north, 2.5 miles west, and 10 miles south of the factories. Winds in that area are predominantly northwesterly in the fall

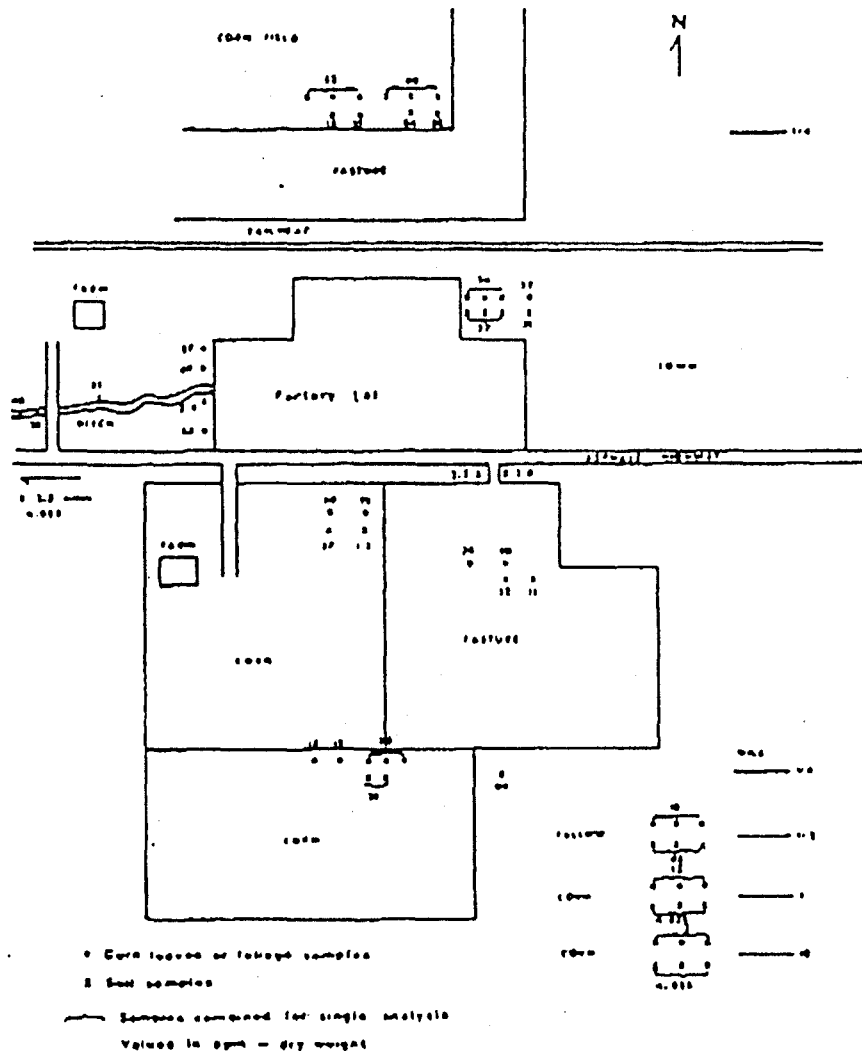


FIGURE 1. Area surrounding Coleman, South Dakota: factory lot consists of two companies adjacent to each other. ppm PCBs as Aroclor 1260.

VOL. 14, No. 1, JUNE 1980

27

Factories were Ross & Services  
T & R  
AKA  
Thompson & Ross  
Same Family as  
Ross Electric  
Jerry (Junk)



of  $< 0.1$  ppm PCBs as Aroclor 1254. Therefore, the PCB levels were above expected concentrations at distances from the factories at least 0.25 mile north, less than 2.5 miles west (soil), and up to 10 miles south (corn leaves) (Fig. 1). One mile south of the factories, the soil contained  $< 0.025$  ppm PCBs, the expected background level, although at 10 miles south of the factories, corn leaves contained 0.12 ppm PCBs, whereas the PCB levels in soil were still  $< 0.025$  ppm, indicating airborne contamination of the leaves. This conclusion was further supported by the analysis of two entire corn plants and the soil on their roots taken 50 yards south of the factory lot (Table 1). The outer leaves contained 1.1 ppm and 2.2 ppm PCBs, the inner leaves contained 0.25 ppm and 0.34 ppm, and the ker-

nels and cobs contained  $< 0.05$  ppm. The 0.29 ppm 0.53 ppm PCB levels in the roots were somewhat higher than levels in the soil on the roots, but the low level, the stalks, cobs, and kernels did not indicate significant transport of the PCBs from the roots to the outer leaves. PCBs in the soil could be due to water drainage from one of the factories as well as from air and dust-borne material, since there was drainage from one factory in this area.

PCBs in surface soils and in corn leaves closely resembled commercial Aroclor 1260 as shown by gas chromatograms in Figure 2. The type of PCB found in waste oils (42 ppm) from one factory also resembled Aroclor 1260 (personal communication, U.S. EPA, Denver, Colo.), whereas PCBs in soils and bottom sediments

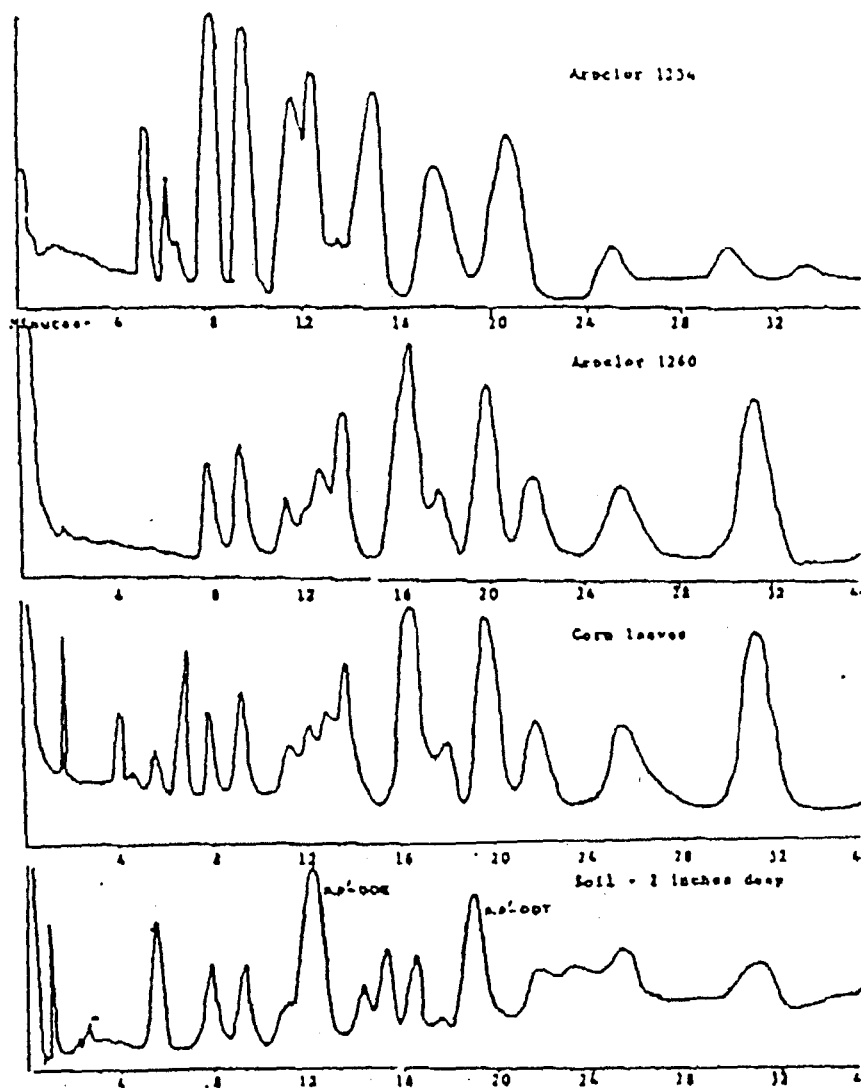


FIGURE 2. Chromatograms of samples compared to standards of Aroclor 1254 and 1260. See text for instrument parameters and operating conditions.

TABLE 1. PCB levels (as Aroclor 1260) in corn plants and soil on roofs, 30 yards south of the factory lot, Culman, South Dakota—September 1977

SAMPLE TYPE	PCBs, ppm Dry Wt	
	SAMPLE No. 1	SAMPLE No. 2
Soil on roofs	0.22	0.24
Roofs	0.29	0.53
Sheds		
Bottom	0.12	<0.1
Middle	0.14	<0.1
Top	0.23	<0.1
Cab	<0.05	<0.05
Kernels	<0.05	<0.05
Inner leaves on ear	0.25	0.34
Leaves on plant	1.1	2.3

NOTE: Samples 1 and 2 each consist of one entire corn plant approximately 10 feet tall.

from other areas in South Dakota did not. Soil taken at 2–4-inch depths from a pasture across the road from one factory, which had not been plowed since 1960, averaged 0.16 ppm PCBs. In the past, both factories had disposed of surplus transformer oil by incineration, and one factory used waste oil to heat the office building and the shop area (personal communication, U.S. EPA, Denver, Colo.). About four years ago, special furnaces were equipped with afterburners to destroy the PCBs. However, the presence of high levels of PCBs on the corn leaves suggests afterburners may not be efficient.

Samples taken from around one factory and analyzed by the U.S. EPA Laboratory in Denver, Colorado, contained PCBs resembling Aroclor 1260 in the following amounts: water collected from the area behind one shop building, 19 ppb; dirt from in front of an incinerator, 31 ppm; and swabs from three windows on a building next to the incinerator, 14 µg/area. There was no contamination of the Colman drinking water. Soil and vegetation taken one mile north of the factories contained 0.011 ppm PCBs. Sediment and vegetation collected about 20 ft west of a fence around one factory contained 0.17 ppm and 0.39 ppm PCBs, respectively. Soil and corn foliage taken 1 mile west of the factories, from the north side of the highway, contained < 0.02 ppm PCBs. No PCBs were detected on corn, cornstalks, and leaves taken about 1 mile east of the factories (personal communication, Food and Drug Administration, Denver, Colo.).

Earthworms and small rodents were collected from the north and south of the factories and from areas near Brookings, South Dakota, believed to be relatively free of PCBs. Earthworms near the factories and near Brookings contained average PCB levels of 1.96 ppm and 0.77 ppm, respectively, with a ratio of levels in the factory area to levels in the Brookings area of 2.5 (Table 2). PCB levels in rodents near the factories ranged from 4.33 to 17.2 ppm in liver tissues and from 3.42 to 6.97

TABLE 2. PCB levels in earthworms and rodents collected near Colman factories and in the Brookings, South Dakota, vicinity, September 1977.

DESCRIPTION	PCBs, ppm		
	FACILITY AREA	BROOKINGS AREA	RATIO OF FACILITY/BROOKINGS
Earthworms <sup>1</sup> ( <i>Octolochus terrestris</i> )	1.85 2.07	0.84 0.87 0.34	2.5
Vole ( <i>Microtus</i> sp.)			
Liver	9.17 4.85 3.42	4.67 2.60	1.9
Muscle	3.42	2.60	1.3
Field mouse ( <i>Peromyscus</i> sp.)			
Liver	9.33 9.10 17.2	2.93 2.20	4.7
Muscle	3.77 6.87 3.91	1.80 1.72	3.1
13-Lined ground squirrel ( <i>Spermophilus</i> sp.)			
Liver	4.71	0.41 1.21 1.44	8.4
Muscle	2.89	0.72 1.11 0.56	3.2

<sup>1</sup> Each sample consisted of 2.5 g dry weight of worms.

ppm in muscle tissues. PCB levels in rodents collected near Brookings ranged from 2.20 to 4.67 ppm in liver tissues and from 1.72 to 2.60 ppm in muscle tissues.

### Conclusions

The sources of the PCBs in the Colman area were related to operations involved in electrical salvage as evidenced by the predominance of Aroclor 1260 in the factory oil and in surrounding areas and by the fact that the highest levels were near the factories and became increasingly lower as the distance from the factories increased.

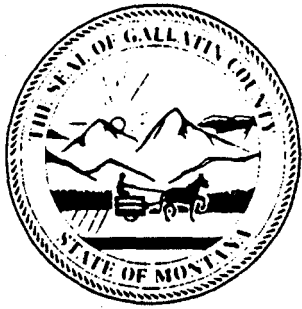
PCBs were dispersed by wind, water, and silt runoff in the immediate area. More distant PCB contamination was primarily airborne because PCB levels in outer corn leaves were unexpectedly high whereas soil levels were very low. Airborne contamination extended at least 0.25 mile north and 10 miles south of the factories.

The contamination was of both past and of recent origin. Levels of PCBs (Aroclor 1260) on outer corn leaves proved recent origin, and PCB levels in soil samples taken 2–4 inches deep from a pasture which had not been plowed since 1960 suggested past contamination.

Bioaccumulation is occurring because PCB levels in earthworms and small rodents collected near the factories were considerably higher than levels in the same types of animals collected from other areas.

LITERATURE CITED

- (1) Ballschmiter, K., M. Zell, and H. J. Neu. 1978. Persistence of PCBs in the ecosystem: Will some PCB components "never" degrade? *Chemosphere* 2: 173-176.
- (2) Greichus, Y., A. Greichus, B. D. Immann, D. Cull, D. Hamman, and R. Post. 1977. Insecticides, polychlorinated biphenyls, and metals in African lake ecosystems. I. Hambetsapoon Dam, Transvaal and Voelvlei Dam, Cape Province, Republic of South Africa. *Arch. Environ. Contam. Toxicol.* 6(4): 371-383.
- (3) Hutzinger, O., S. Safe, and V. Zliko. 1973. The Chemistry of PCBs. CRC Press, Cleveland, Ohio.
- (4) McGuire, V. E., and J. Lagrange. 1977. Deposition of heavy chlorinated hydrocarbons from the atmosphere. *Bull. Environ. Contam. Toxicol.* 17(2): 219-224.
- (5) Morita, M., J. Nakagawa, K. Akiyama, S. Mimura, and N. Isono. 1977. Detailed examination of polychlorinated dibenzofurans in PCB preparations and Kanemi Yusho oil. *Bull. Environ. Contam. Toxicol.* 18(1): 67-73.
- (6) Peakall, D. 1972. Polychlorinated biphenyls: Occurrence and biological effects. *Residue Rev.* 24: 1-21.
- (7) Risebroun, R. D., Peakall, S., Herman, and W. K. 1968. Polychlorinated biphenyls in the global ecosystem. *Nature* 220(5172): 1098-1102.
- (8) Suckel, W. 1973. *Ecological Toxicology Research*. Plenum Publ. Corp., New York, N.Y. Chap. 2: pp 25-74.
- (9) Turner, J. P. 1973. *Chemecology*. Manufacturing Chemists Association, Washington, D.C., April p. 4.
- (10) Vos, J., J. Kueman, H. Van Der Maas, M. C. Ten Noever De Brouw, and R. De Vos. 1970. Identification and toxicological evaluation of chlorinated dibenzofuran and chlorinated naphthalene in two commercial polychlorinated biphenyls. *Food Cosmet. Toxicol.* 8: 623.



County Commission

# County of Gallatin

311 West Main - Room 301  
Bozeman, Montana 59715

EXHIBIT 8

DATE 3-17-93

HB SB 338

Telephone (406) 585-1400

Telefax (406) 585-1403

TO: ALL MEMBERS OF THE MONTANA HOUSE OF REPRESENTATIVES

FR: DEB BERGLUND, GALLATIN COUNTY COMMISSIONER *DB*

RE: SB 338-SITING CRITERIA FOR HAZARDOUS WASTE INCINERATORS

DATE: MARCH 1, 1993

-----

Prior to becoming a County Commissioner, I was a research scientist. I have a Masters Degree in Chemistry, and have performed research in two fields related to the potential health effects of incineration of hazardous materials; cancer research, and analysis of reactions of trace organic molecules when vaporized at high temperatures. I feel that I have a background that allows me to speak as an informed scientist, as well as a County Commissioner.

Last year when Holnam first proposed to incinerate hazardous wastes, I did a search of the scientific literature and read many articles on the subject. I was appalled at how little was known about the consequences of incineration of these wastes. Although anecdotal material that concludes that cancers are radically increased in areas where hazardous wastes are incinerated, no reliable studies have been done to determine exactly what the causes are. The cement industry will claim that there is no correlation between their incineration and any health effects. I strongly and absolutely believe as a scientist that there is a direct correlation, although it is hard to prove these things. Take as an apt comparison the tobacco industry claim that there is no correlation between smoking and cancer. We all know that this is not true. I also adamantly believe that incineration of hazardous materials can be safe, but the only way it can be made safe at the present time is to locate the incinerators in unpopulated and non-productive places. The idea of using hazardous wastes to produce energy to result in a product is also a good one, but we need to do this without risking the health of our people and our economy.

No one knows exactly what comes out of the stack of hazardous waste incinerators; the research has not been done. If wastes are not completely incinerated there will be potentially poisonous molecules formed and released. We do know that heavy

SB 338-SITING CRITERIA FOR HAZARDOUS WASTE INCINERATORS

MARCH 1, 1993

PAGE 2

metals (lead, mercury, etc.) will come out of the stack as they are not incinerated. There is no safe level of lead, especially for growing children. We know that people make mistakes, and that there are common upsets in the cement industry when for a period of time non-incinerated gases escape.

Gallatin County is the headwaters of the Missouri River and a productive farming area, as well as the fastest growing county in Montana. I speak for the Gallatin County Commissioners, the Bozeman City Commission, and the majority of the people in Gallatin County when I say that we do not want to have a hazardous waste incinerator a few hundred feet from the river, and upwind from populated areas.

I believe that a strong siting act for hazardous waste incinerators is essential to protect the health of Montanans. I also believe very strongly that Montana should handle its own hazardous materials, and that incineration is probably a good way to handle them. However, it is a very bad idea to do it near population centers and sensitive surface waters. We must have siting criteria that allows and encourages incinerators in remote unpopulated areas. I ask you to please support SB.338.

If you would like to ask me questions, please call me at 585-1400.

Thank you for your attention.

A:\WPS1\HAZMAT.DEB

TESTIMONY BEFORE SENATE COMMITTEE  
ON SB 338

EXHIBIT 7  
DATE 3-17-93  
~~HB~~ 338

March 17, 1993

Rachael Raue Sirs  
Box 928 MCR  
Clancy, MT 59634

Chairman and Members of the Committee, good afternoon. My name is Rachael Raue Sirs. I am here to support SB 338, the Dangerous Waste Incineration Facility Siting Act. My husband, I, and our four children live in the Montana City area. I was born and raised in Helena. Our children attend or will attend the Montana City School, which is 1/2 mile from the Ash Grove Cement plant, 7-1/2 hours a day, 180 days a year, for 9 years. By current profession, I am a full time mom. By degree and prior profession I am a petroleum engineer that had to deal with disposing hazardous waste on a daily basis. So when plans were announced to burn hazardous waste in Montana, I was optimistic.

Then I started reading and researching. I found out why no one - not the cement companies, not the Department of Health and Environmental Sciences, or the EPA, or any expert can tell us what exactly is emitted when a cement kiln burns hazardous waste. Hazardous waste fuels are made up of a variety of chemicals. When all these different chemicals are burned, they are combining and recombining, and we can't keep track of all the combinations. We do know that when blended waste chemicals are burned, portions are emitted in their original forms and some recombine to form new toxic compounds, some even more toxic than the parent compounds, called particles of incomplete combustion, or PIC's. Dioxins and furans are some of the most dangerous PIC's. Studies have identified few of all the PIC's known to be present in stack gases. Also,

heavy metals, such as lead, arsenic, and mercury can not be destroyed or detoxified by fire. As a result, waste burning kilns only redistribute any metals through air emissions, kiln dust, and concrete products. So we have cement kilns dealing with mixtures of hundreds of chemicals, many of which are not well known, and the combinations of which are not well understood. That's why we don't know exactly what is coming out of the stack, or going into the cement product, or going into the cement kiln dust which is disposed of in the old quarry when hazardous waste is burned in cement kilns. Because of all the unknowns, more studies and siting criteria need to be addressed.

My son has chemical allergies. Prior to moving to Montana City from Bakersfield, CA, he had been sick with migraine type headaches for two years. He had been to several specialists and had loads of testing like CAT scans. Then we found out it was just the air that was making him sick. He had been better since moving here. This winter we had a lot of days that the plume was laying on the ground, just about the whole month of January and some of February. Only a couple of these days were considered "inversion days". He has been out of school 14 1/2 of the last 19 school days. The doctor said it could be related to the emissions. Imagine what it would be like if the plume also contained other chemicals. At least he is not sick continuously like before.

The Department of Health and Environmental Science Boiler and Industrial Furnace rules were completed at the end of November. Companies can now apply for the part B permit to burn hazardous waste. The state regulations are slightly more stringent than the federal regulations but DHES could not address siting - it's out of their authority. We have been told that the only place siting can be considered is in the Legis-

lature. We have also been told by DHES that public opinion, or public outcry, cannot be considered in the permitting process. They have to follow the "rules" strictly.

I would like to address economics. I attended the Baucus sub-committee hearings in March 1992 on the burning of hazardous waste in cement kilns. Both cement kilns stated there that they would not "go under" if they were not permitted to burn hazardous waste. In a study which compared cement sales to geography, it was found that on the average 60% of cement is used within 100 miles, 23% is used within 199 miles, only 0.5% is used more than 1500 miles, and 74% goes to ready mix. Since the closet cement plants having the so called "economic advantage" of burning hazardous waste are in southern California and Nebraska, we are not competing against them. Ash Grove has increased the number of their employees since I've lived here and they are running at capacity. Other companies aren't going to want to ship cement into Montana to try to compete because of high transportation costs. Living in Montana is unique. Since we are remote we pay more for food, clothing, etc. than in states where factories are closer. If Ash Grove had to charge more for their cement, people would buy it because there isn't any where else to get it - supply and demand.

Another item I would like to address is oxygen. Everyone knows you need oxygen for a good burn. Cement kilns need to operate at a very low oxygen level to make a good quality cement. So even though they have a high temperature, they do not have a good fire to burn hazardous wastes.

I urge you to vote for the people, for health, not special interest groups. Vote "DO PASS" on SB 338. Thank you.

*Rachael Bauer Sims*



# **DR. ALLEN S. LEFOHN**

## **Biographical Sketch**

- **Received Ph.D. in physical chemistry from the University of California at Berkeley.**

- **Research involves**

**The development of dose-/exposure-response relationships describing the effects of pollutants on the ecosystem.**

**The analysis of air quality data for assessing the effects of air pollutants on human health and the ecosystem.**

**The analysis of deposition and effects data to better assess the potential for biological effects.**

**The analysis of air quality data and changes associated with global climate change.**

- **Chairman of the United Nations World Meteorological Organization Expert Meeting to evaluate surface ozone exposures and trends at remote locations in the world.**
- **The lead author of the White House report: State-of-Science Report No. 7: Air Quality Measurements and Characterizations for Vegetation Effects Research.**
- **Published over 150 peer-reviewed papers and technical reports, edited 4 books, and presented numerous oral papers.**
- **Serves as Executive Editor of the prestigious international scientific journal *Atmospheric Environment*.**
- **Member of Technical Council of the Air & Waste Management Association.**
- **Resides for the last 17 years with family in Clancy, Montana.**

EX-10  
DATE 3-17-93  
SB 338

TESTIMONY IN SUPPORT OF SENATE BILL 338  
HOUSE COMMITTEE ON NATURAL RESOURCES  
MARCH 17, 1993

Allen S. Lefohn, Ph.D.  
Clancy, Montana 59634

EXHIBIT 10.  
DATE 3-17-93  
HB SB 338

EXECUTIVE SUMMARY

- The incineration of hazardous waste by cement kilns or any other **inappropriately located** facility represents one of the most immediate threats to human health and the environment. The reality of the situation is that the immediate threat is far greater than the threats associated with acid rain or ozone depletion.
- **The state and federal rules governing the burning of hazardous waste are inadequate.** For example, these rules fail to take into account the risks associated with the effects of indirect exposure to toxic emissions.
- In addition to ignoring the indirect risk associated with burning hazardous waste, test burns required of such facilities do not prove their safety. **99.99% or 99.9999% destruction of a few selected chemicals does not prove that a facility is safe to operate.** The test burn is performed under optimal conditions using a few chemicals. Toxic chemicals are transformed into other compounds inside the incineration device. **Although the transformed compounds may be more toxic than the original form, from an accounting standpoint, they are considered to be "destroyed."**
- Approximately 10% of transformed chemicals have been identified and they include dioxins. The other 90% are simply unknown.

TESTIMONY IN SUPPORT OF SENATE BILL 338  
HOUSE COMMITTEE ON NATURAL RESOURCES  
MARCH 17, 1993

Allen S. Lefohn, Ph.D.  
Clancy, Montana 59634

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

As one of the leading U.S. scientists in the area of environmental response to pollution exposure, I have concluded that the incineration of hazardous waste by cement kilns or any other **inappropriately located** facility represents one of the most immediate threats to human health and the environment. The reality of the situation is that the immediate threat to humans and the environment is greater than that of acid rain or ozone.

Over the past several weeks, I have been amused to read newspaper accounts and to listen as television and radio reported the "scientific facts" as "spun" by politicians and lobbyists. It is clear that many of these so-called experts did not learn their science lessons well in school.

On January 22 and February 15, 1993, I testified to the Senate Natural Resources Committee on the technical concerns I had regarding the "upsets" associated with hazardous waste burning and the possibility of exposing humans and the environment to unexpected emissions of toxic pollutants. Upsets occur because of power failure, poor mixing, equipment failures, and changes in pressure due to burning reactive or explosive waste. Since that time, I have continued to discuss with my scientific and engineering colleagues across the country the health and environmental problems associated with facilities that burn hazardous waste. Based on all available information at this time, it is my opinion that Montana needs "buffer" zones to protect its people and the environment from unanticipated toxic emissions. Senate Bill 338 provides for such protection.

There are several important facts associated with hazardous waste burning that require the creation of these buffer zones. These facts include

- The U.S. Environmental Protection Agency is currently very concerned about the presence of carcinogens found in cement and cement kiln dust, as well as the emissions from cement factories burning hazardous waste. Important additional studies are underway.

- Based on a recent U.S. Environmental Protection Agency study, for cement kilns burning hazardous waste, **greater** concentrations of carcinogens have been measured in some samples of cement and cement kiln dust than were measured for cement kilns not burning hazardous waste.
- Claims that low-level concentrations found in cement kiln dust and cement will not result in adverse impacts on human health appear to be based on **direct** inhalation estimates which have not taken into consideration the risks associated with **indirect** ingestion.
- The U.S. Environmental Protection Agency has recently issued a draft report to the federal court in Ohio stating that humans eating beef from cattle raised near a hazardous waste facility in Ohio may be exposed to levels of dioxins estimated to present a risk 1000 times greater than the carcinogenic risk associated with inhalation. Risk assessment results in a court case involving the U.S. Environmental Protection Agency in Texas also have shown greater risk when including the contribution of ingestion of garden vegetables grown near a hazardous waste incinerator. It appears that future risk assessments will have to include **indirect** considerations.
- **The state and federal rules governing the burning of hazardous waste are inadequate.** These rules fail to take into account the effects of indirect exposure to toxic emissions.
- Hazardous waste incineration creates products of incomplete combustion which may be more complex than the original hazardous materials being burned. These chemicals may be more toxic than the parent compound.
- Only 1-10% of the products of incomplete combustion known to be in stack gases have been identified. Some of these chemicals are carcinogenic and we simply do not know how many of the remaining unidentified 90% are toxic or carcinogenic.
- Removing 99.99% of a toxic compound during a test burn is not relevant for protecting the public safety. The test burns are based on using a few well-characterized toxic chemicals that are introduced at high concentrations under optimum conditions. The burn's results are based on the removal of specifically identified chemicals (usually 4-6 chemicals). If a chemical is converted into a different organic compound, which may be poisonous, it is considered to have been "destroyed," even though it is not. It is recognized that only a small

percentage of these new organics are known. Thus, the **test burn** will not normally provide information about the ability of the facility to reduce the emissions of the most carcinogenic organics. We know very little about the level of reduction of the incomplete combustion products.

- Heavy metals are not destroyed or detoxified. They are redistributed in the waste through air emissions, fly ash, dust, and concrete products.
- Chlorinated dioxin and dibenzo-furans are emitted into the air.
- "Upsets" (malfunctioning of the facility) do occur and the emissions caused by "upsets" can adversely affect humans and their environment.
- "Upsets" can emit massive amounts of uncombined materials into the air. Some of these materials are carcinogenic.
- From past experiences in Montana, the highest concentrations of pollutants in the air and in the soils occur within 5 miles of emission sources. A "buffer" zone around hazardous waste facilities is justified.
- Accidental spills or fires may release extensive toxic materials into the environment.
- Incinerators generate toxic emissions, including heavy metals such as arsenic, cadmium, mercury, chromium, and lead, that cannot be destroyed by incineration. Metals can attach to small particles in the emission gases and ultimately escape the pollution control equipment.
- Definitive studies around hazardous waste burning facilities do not exist. Midlothian, Texas, about 30 miles from Dallas, has three cement plants within a three-mile radius of each other. Two are currently permitted to burn hazardous waste fuels, although only one plant has been burning since the spring of 1991. The third plant has applied for permission to burn tires as a supplementary fuel. Monitoring efforts began in Midlothian in 1991 to respond to citizens' concerns that the three area cement plants were contributing to area air pollution. The project was designed to characterize community exposures and to evaluate the measured concentrations, without regard to their sources. The data that apply to cement kiln operations in the Midlothian monitoring program are limited solely to ambient air samples and surface soil samples. There are a number of data gaps that need to be filled before conclusions can be drawn. The testimony

that cement kilns burning hazardous waste are completely safe can only be made when all the applicable data collected in the air, water, and soil components of the ecosystem have been analyzed and when all relevant routes of exposure (i.e., inhalation, oral, and dermal) have been evaluated to the fullest extent possible. **At this time, because of the preliminary nature of the Midlothian data, it is inappropriate to attempt to draw any bottom-line conclusions.** It cannot be concluded that the experience in Midlothian is evidence of safety in all communities across the United States. Midlothian cement kilns may operate under completely different conditions than cement kilns elsewhere, as composition of waste streams, operating conditions, controls, permit limitations, siting requirements, etc., vary widely.

Renewed concern about hazardous waste incineration in the United States has resulted in the U.S. Environmental Protection Agency reassessing the way in which it estimates the human health risk associated with emissions from hazardous waste burning. Until recently, assessment methodology has involved estimating only the risk associated with **direct inhalation** of the emissions from hazardous waste burning facilities. Within the last six weeks, the U.S. EPA has made public a draft report that indicates that the risk associated with **indirect** exposure appears to be much greater than the risk associated with direct inhalation. Based on this new information as well as additional data, a federal judge on March 5 prohibited commercial operation of a hazardous waste facility in Ohio pending analysis from the trial burn. The analysis could take up to a year to complete.

The Texas Air Control Board (TACB) is concerned about by-products such as cement kiln dust and clinker for those facilities burning hazardous waste. Using the U.S. Environmental Protection Agency data that showed dioxins and furans in cement and cement kiln dust, it was concluded that, in the event that the cement kiln dust was accessible to children, the by-products might produce adverse health effects following ingestion. As stated by the TACB:

**"It is also important to note that all of the samples merely represent snapshots in time and thus, generalizations are not possible. Nonetheless, these data do provide support for a need to look at plants individually, as well as a need to monitor by-products such as CKD and clinker for dioxins and furans on a regular basis in order to ensure public safety."**

Because of its concern to protect the public's health, in February 1993, the Texas Air Control Board issued its final report of the **Task Force**

**on Waste-Derived Fuels for Cement Kilns.** The task force was composed of 18 members who were asked to explore the various issues related to the development of public policy concerning the burning of waste-derived fuels in cement kilns and to provide recommendations concerning such policy to the members of the Board. The task force members mostly represented a cross-section of government, industry, and citizen groups within Texas. One of the members of the task group was a representative of the cement industry from Seattle, Washington. This person has provided technical testimony in Montana. One of the important regulatory principles adopted by the Task Force was

**"Cement kilns commercially burning hazardous waste and commercial hazardous waste incinerators should be held to the same standards, enforcement, and monitoring."**

In addition, the Subcommittee on Rules and Regulations recommended that

**"...cement that has been manufactured with hazardous waste as a fuel shall be labeled as such and/or the purchaser informed of the fact that it was hazardous waste manufactured."**

Although the Task Force did not reach consensus as to whether cement manufactured with hazardous waste as a fuel should be so labeled, it recommended that an appropriate regulatory or legislative authority **examine the conflicting data in this area and determine how best to accommodate the public's right to be informed along with other policy considerations.**

The U.S. Environmental Protection Agency, as well as states such as Michigan, Ohio, and Texas, are concerned about the burning of hazardous waste. Given the large amount of uncertainty associated with the risk of burning hazardous waste, it is imperative that a "buffer" zone be created to protect the public and the environment. ***This is our insurance policy.*** Senate Bill 338 provides the public with some level of safety.

Unless Montanans move quickly, hazardous waste from other states and countries will be shipped to Montana to facilities that are ill-equipped to burn hazardous waste. It is important that Montana's citizens, through the legislative and executive process, be guaranteed that the risks to humans and the environment be kept to a minimum. **We must act on the side of caution and not allow Montanans to be used as experimental subjects for the rest of the nation.** The warning signals are clear. The adoption of a siting criteria is the first step in protecting Montanans.

Testimony of :

**Eric D. Schneider**  
211 South I. St.  
Livingston MT  
59047

Before:

**Montana House Committee on Natural Resources**

**On SB-338**

My name is Eric Schneider and I am a research ecologist and a recently retired senior scientific manager from the federal government. The majority of my 26 year career with the federal government was spent either directing environmental research or managing federal-wide environmental programs. During much of this time I have carried out an active research program in attempting to develop scientifically based criteria for environmental decision making. My present research is two fold; first, attempting to understand the scientific basis for the science of ecology and secondly I am interested in the distribution, fate, and effect of toxic chemicals in the environment. With this career as a background I have three observations on the siting and operation of hazardous waste incineration facilities in Montana.

**1. Hazardous wastes are very toxic** The hazardous wastes that are being considered for incineration in the proposed Montana facilities are very toxic chemicals to humans, livestock and indigenous ecosystems. For example, some of the compounds that make up a class of chemicals known as polychlorinated hydrocarbons (PCB's) are toxic to test animals in levels below one part per billion. Other of these chemicals are known to cause cancer in humans. A February 13, 1993 U.S. Environmental Protection Agency cement kiln dust report, showed that a Holnam cement facility [REDACTED] had levels of lead exceeding 100 parts per million in the kiln dust in their plant. If some of these chemicals were to be distributed via atmospheric fallout caused by technical failure in the incineration process, hundreds of square miles could be contaminated and made unfit for agricultural use.

**2. Scientists cannot predict the effects of most toxic materials on our health, agriculture products and important ecosystems.**

Ecology is at best an immature science. Ecology is an observational science and makes very few predictions. We were not able to predict that DDT would biomagnify in the food chain and affect the thinning of egg shells in certain species of birds. Chemicals are changed by biologic, chemical and physical processes. Common mercury is converted to a very toxic form by bacteria. This was another process not predicted but observed once it was found in the



environment. Even when we know that a compound is toxic there is little toxicological data , chemical fate information available for scientific assessment. I am not an expert in hazardous waste combustion technology but I am an expert in ecology and I can tell you that anyone who tells you they know the fate and effects and risks of toxic materials in the environment without specific data on the site, and have no regional monitoring data, are selling you a bucket of hogwash. If some of the toxic materials slated for combustion in Montana are released into the environment ( and it certainly will happen) it is a crapshoot on the effects on our health , our agriculture products and important ecosystems.

**3 Because we cannot predict the fate and effects of toxic materials on our environment it, is imperative that hazardous waste sites be optimally sited and a rigorous independent monitoring must be required in and around each facility.** Over the past 20 years I have initiated environmental monitoring programs, from a local, regional, national and global scale. Without this data, lawmakers and regulators would have no information for corrective action, if it might be required. An independent laboratory ie. a Montana University should be given the task of monitoring all materials coming into and leaving the site , conducting unannounced burns, and monitoring for potential pollutants in humans, agricultural products, and in a few key ecosystems. These data should be reviewed by an independent board so that lawmakers and local populations can take corrective action. I have read the present Montana incinerator regulations and they fall far short on the requirements for monitoring this proposed industry. If Montana decides that it should be responsible for the disposal of our own generated wastes, first we should implement a program to minimize those wastes, have private industry propose the appropriate technology and have a scientific siting and monitoring program.

I will be available to answer any questions that you may have on my testimony or the issues under consideration

# Vitae

EXHIBIT 11  
DATE 3-17-93  
SB 338

**Eric D. Schneider**  
211 South I. St.  
Livingston MT  
59047  
Tel: 406-222-2054

## I. Education

1962 B.S., University of Delaware, Honors

1965 M.S., Columbia University, Lamont-Doherty Geological Observatory

1968 Ph.D., Columbia University, Lamont-Doherty Geological Observatory

## II. Professional Background

1993- PRESENT

### **Research Scientist:**

*Theoretical ecology.*

The present focus of my research is a synthesis of physics and biology at the fundamental level. Specifically I am studying the intersection of physics with ecology . As part of a larger research group, we are attempting to develop the underlying principles that will explain the development of ecosystems and the causality of the patterns observed in ecosystems. Our research is investigating measures of ecosystem development, stress and integrity.

### *Regional and Global Monitoring of Toxic Pollution*

For the past twenty years I have been a part a research team that has been monitoring global coastal ocean pollution for toxic chemicals using sentinel organisms. This research program allows integration of land based pollution and determination of potential pesticide and toxic chemical production and use that may effect public health or ecosystem integrity.

1991 -1993

**Senior Research Scientist**; National Ocean Service, National Oceanic and Atmospheric Administration, (NOAA). Coordinator NOAA high latitude-cryosphere climate research program. Conducts an active research

program in theoretical ecology. Active participant in United Nations Global Toxic Monitoring program.

1988-1991

**Senior Scientist: National Ocean Service, NOAA.** Senior scientific and technical director of \$130 million dollar ocean science program inc. Coast and Geodetic Survey, National Coastal Zone Management science program, coastal and global toxic environmental monitoring, and global climate studies.

1985- 1988

**Senior Research Scientist,** Chesapeake Biological Laboratory, University of Maryland Center for Environmental and Estuarine Studies, Solomons, MD. Conducted research into theoretical issues in ecology. Studied the role of thermodynamics in ecosystem development. Started University of Maryland Coastal Policy Institute. Participant in participant in United Nations Environment Programs in Global Toxic Monitoring, member Global Mussel Watch Science Board, a United Nations supported global toxic monitoring program.

1982 - 1985

**Senior Scientific Assistant to the Administrator, (Chief Scientist), National Oceanic and Atmospheric Administration, (NOAA);** Washington D.C. . Senior scientific advisor to the Administrator of NOAA. Scientific oversight of the National Ocean Service, the National Weather Service, the National Marine Fisheries Service and the National Weather Service. Directed Interagency Federal Ocean Council, coordinated NOAA interagency scientific programs.

1979 - 1982

**Research Fellow,** Center for Ocean Management Studies, University of Rhode Island, Kingston, R.I.; Initiated a research program in theoretical ecology, searching for criteria to determine the "health of ecosystems". This research led to the study of the thermodynamic evolution of non-equilibrium emergent systems. Taught courses in environmental scientific policy.

1972 - 1979

**Director, National Marine Water Quality Laboratory, United States Environmental Protection Agency (U.S. E.P.A.),** Narragansett, R.I.. Directed the nations largest marine pollution research laboratory. Research programs including; national and international coastal pollution monitoring, marine pollution toxicology, ecosystem studies, and marine chemistry. International activities; Director U.S.-U.S.S.R. bilateral Marine Pollution Science Program, participant in United Nations Environment Programs.

1971 - 1972

**Director, Science and Policy Office, U.S. Environmental Protection Agency, Washington, D.C.** Directed a small interdisciplinary staff of scientists, including chemist, ecologists, physician, engineers that analyzed major EPA policy issues from a scientific viewpoint. Problems includes Alaskan oil pipeline, phosphate removal from detergents, and national air and water quality standards. Initiated several national environmental monitoring programs.

1967 - 1971

**Director, Global Ocean Floor Analysis and Research Center, U.S. Naval Oceanographic Office, Washington, D.C..**  
Director of a small (40 employees) geophysical research laboratory for the United States Navy. The laboratory studied geophysical, geological, chemical and oceanographic processes of the deep sea.

### III. Publications

Over 75 peer reviewed journal and book articles on geophysics, environmental protection , monitoring for toxic chemicals in the coastal regions and theoretical ecology.

Recent articles:

Kay J. and E. Schneider.1992. Thermodynamics and measures of ecosystem integrity. in: Ecological Indicators. ed. McKenzie: 159-182: Elsevier; Amsterdam; .

Schneider,E.D., J.J. Kay. and J. Luvall. 1992. Thermal remote sensing as a tool for categorizing landscapes in terms of their ecological development. Inter. Assoc. for Landscape Ecology, Seventh Ann. U.S. Landscape Ecology Symposium, p. 109.

Schneider E.D.. 1992. Monitoring for Ecological Integrity. in: Ecological Indicators. ed. McKenzie: 786-799, Elsevier; Amsterdam; .

Schneider, E.D. and J.J. Kay, Life as a Manifestation of the Second Law of Thermodynamics. in press, (1992): Advances in Mathematics and Computers in Medicine.

EXHIBIT 11  
DATE 3-17-93  
SB 338

913 Smith River Road  
White Sulphur Springs  
MT 59645  
March 17, 1993

House Natural Resource Committee  
Representative Dick Knox  
Capitol

EXHIBIT 12

DATE 3-17-93

~~SB~~ 338  
HB

Dear Chairman Knox and Committee Members:

For the record, I am Rebecca Johnston and my husband is Donald Johnston. We ranch in the White Sulphur Springs area and both of us are fourth generation Montanans.

Our full and strong support goes to SB 338. This bill, in our opinion, is a compromise bill. Many citizens throughout the state of Montana do not want any type of commercial dangerous waste incineration. Therefore, if we must engage in this type of industry, let's be proactive -- let's have regulations in place before permitting industries of this nature.

As you will note, the enclosed sheets contain two articles -- one from the Bozeman Chronicle - March 15, 1993, and the other from the Billings Gazette - March 15, 1993. In both of these articles, the EPA states that great risks do exist in hazardous waste burning and that the EPA is considering establishing "buffer zones" for such burning -- similar to the provisions in SB 338.

We feel the two enclosed news articles express the concerns we have in the burning of hazardous waste.

We appreciate your consideration in this matter. Again, we urge you to PLEASE SUPPORT SB 338. Thank you for your time.

Sincerely,

*Rebecca E. Johnston*  
*Donald W. Johnston*

Rebecca E. Johnston  
Donald W. Johnston

# EPA eyes burner buffer zones

By SHAWN VESTAL  
Chronicle Staff Writer

The Environmental Protection Agency will consider requiring "buffer zones" for hazardous waste burners, similar to those sought in a bill before the Montana Legislature.

However, EPA combustion chief Robert Holloway said today foes of hazardous waste burning at two Montana cement plants were off-base to draw a comparison between a study of risks at an Ohio incinerator and cement kilns here.

A bill before the state House would prevent hazardous waste burning near rivers or schools. If the

measure passes, it would end plans to burn such waste at Holnam Inc.'s Trident plant, which sits on the banks of the Missouri River, and Ash Grove's Montana City plant, which is near a school.

The idea of the EPA requiring such a buffer zone came up at a meeting of environmentalists, industry representatives and government officials in Washington, D.C., in late February, Holloway said.

Such a requirement, while controversial, could be adopted within a couple of years, because "even in a perfect world, accidents happen," Holloway said.

That has been the reasoning used by proponents of Montana's siting bill. Burning foes last week said the EPA's admission in an internal memo that it had

underestimated cancer risks at an incinerator in East Liverpool, Ohio, was further reason to support the bill.

Holloway, though, said such risk analysis is "very site-specific" and often is proven wrong by actual burning conditions.

"It's no longer science; it's purely art," he said of the analysis process. "It's unbelievable how many assumptions you have to make."

Cement industry representatives today accused burning opponents of using emotion instead of science. In addition, they said the Montana plants intend

(More on EPA, page 8)

EXHIBIT #14

DATE 3-17-93

88 HB 338

EPA/ from page 8

to conduct the food-chain studies the EPA initially overlooked.

Stuart Weiss, an engineer for Holnam based in Dundee, Mich., said the Montana plants would analyze indirect risks as part of the state's permitting process.

"There is some increase (in risk), you can't question that," he said. "The question is, 'What does that mean for cement kilns?' ... It's still not going to be considered a significant risk."

"Risks are risks," said Tom Daubert, a lobbyist for Ash Grove. "That's just as applicable to a car as it is to a cement kiln or a wood stove or someone standing next to you smoking a cigarette."

The EPA's initial risk assessment at the Ohio plant was based solely on dangers associated with direct inhalation of smokestack emissions, which has long been the agency's practice.

A citizens group sued the agen-

cy, asking that it be forced to consider "indirect risk" — the risk that cattle will forage on land contaminated with dioxin from the plant and pass the carcinogens on to people through beef or milk.

In a memo addressed to EPA administrator Carol Browner on Jan. 22, an agency official acknowledged that the health risks through the food chain may be 1,000

greater than the direct risks.

Holloway said the Ohio analysis — which led a judge to temporarily restrict the incinerator from operating — means any proposed burning of hazardous waste should be studied carefully for possible food-chain impact.

"The real question is 'What is the resultant risk?'" Holloway said. "One hundred times of nothing is

nothing."

Industry officials say that is an accurate description of cement kiln risk. The kilns burn hotter than waste incinerators and almost totally destroy any hazardous waste, said Tom Daubert, a lobbyist for Ash Grove in Helena.

"There is no similarity between a kiln and an incinerator," Daubert said. "Kilns are much more efficient at destruction."

Bllap Goppte  
March 15 '93

# Waste burning risk discussed

BOZEMAN (AP) — An internal Environmental Protection Agency memo says health risks associated with hazardous waste incinerators may be 1,000 times greater than previously presumed, it was reported Friday.

Opponents of plans to burn hazardous waste at two Montana cement plants say the new assessment would also apply to cement kiln burning.

In the past, the EPA has evaluated health risks of hazardous waste emissions based only on direct exposure — inhalation.

However, an Ohio judge recently forced the agency for the first time to assess an incinerator's "indirect risk" — the risk that cattle will eat grass laced with carcinogenic dioxins and pass them on to humans, for example.

"A preliminary assessment ... does show that risks from beef and milk consumption can be 1,000 times higher than risks from inhalation near the (Ohio) facility," according to the Jan. 22 memo addressed to EPA administrator Carol Browner.

The memo was written by Richard Guimond, assistant administrator with the EPA's Office of Solid Waste and Emergency Response. The newspaper said it could not reach Guimond for comment.

A former EPA scientist from Helena said the assessment applies to cement kiln burning because the EPA didn't analyze indirect risks at those sites.

"It does affect the way people will evaluate risk associated with all burning of hazardous waste," said environmental scientist Allen Lefohn, a supporter of legislation to prevent toxic burning at two Montana cement plants. One plant is near Three Forks along the Missouri River; the

other south of Helena near Montana City and its elementary school.

The bill would outlaw hazardous waste burning near rivers or schools.

A public hearing on the measure is scheduled for Wednesday in Helena. The bill passed the Senate with a one-vote margin and awaits House approval.

Industry officials have argued that cement kiln burning is safer than incinerators because they burn hotter. As a result, hazardous materials are almost totally destroyed, industry officials say.

"A longer-term issue, which will require Agency-wide consultation, is how to devise a national policy regarding indirect exposure assessments for dioxin," Guimond's memo said. "This could have major implications for numerous EPA programs and could require a reevaluation of risks at many other sources of air emissions."

Citizens in East Liverpool, Ohio, recently sued the EPA, contending its assessment of health risks was incomplete. A judge ruled March 5 that the incinerator could conduct an eight-day test burn but couldn't burn further until the EPA completed a final study of indirect risks.

Guimond's memo does not say exactly how great the food-chain risk is.

However, it does say that the indirect risk analyses "have a much greater degree of uncertainty because they involve a large number of exposure-related assumptions ... (and) risk estimates can be unrealistically high."

EXHIBIT

DATE

#13  
3-17-93  
SB-HB 338

## OUR OPINION

## Let's get to the issue

*So far, waste-burning debate has been a popularity contest*

Though they would argue otherwise, opponents of plans to burn hazardous wastes in a pair of Montana cement kilns are clearly so over-zealous on the issue they would oppose the incineration of these wastes in this state in any form and in any place.

On the other hand, proponents of the plans indulge in equally excessive hyperbole when they argue the location of these plants is not even an issue. They say if the right safeguards are in place the burning facility can be placed *anywhere*.

To appreciate the absurdity of that contention, one need only imagine a proposal to place the waste-burning facility near downtown Bozeman, or smack dab next door to a hospital or a pre-school. The reaction would be unequivocal, swift and furious: Forget it.

Despite all this overstated rhetoric, the fight over waste-burning in Montana has percolated to the surface a most pertinent facet of the whole issue: Where such a facility should be located.

However, the debate on a bill that would restrict waste-burning locations so far has been nothing more than a referendum on the two cement plants' applications. Vote for the bill and you're against the cement companies. Vote against the bill and you're for the cement companies. The real issue of facility location has yet to be confronted in any meaningful way. The senators' trading of favors back and forth with special interests has put the measure down for the count and then back on its feet again more times than a pro wrestler. As the week ended, the only things that were keeping it alive were the death of one senator and a miscast vote by another.

Now that the measure has miraculously survived through a Senate vote, House leaders should take it upon themselves to ensure a serious discussion on hazardous waste burning facilities' locations. Unlike their Senate colleagues, they should keep their eye squarely on the issue.

The bill before the Legislature,

which would ban waste burning within five miles of homes, streams, schools or farms, may be entirely too restrictive for a process that most would agree is — if not squeaky clean — at least more desirable than continuing to dump these materials into the earth. The bill would place the siting of such a plant off limits in all but 11 of Montana's 56 counties, according to the bill's backers. Industry representatives, however, question whether there's a square foot in Montana that would meet the standards.

The siting bill as it left the Senate should be opened to amendment in the House. A reasonable compromise could include a two-year sunset provision that would force lawmakers to take up the issue again when there is more unjaded information available. The bill could also be amended to include more reasonable distances from sensitive areas for the location of these facilities.

Some limits are clearly needed.

While waste-burning proponents argue the process can be safer than the coal-burning process that sometimes fuel the kilns now, a technology at such an early stage of development that would employ such a wide variety of hazardous wastes can provide no such iron-clad assurances. Reasonable distances from population centers and environmentally sensitive areas are needed to insulate these areas for possible exposure to spills or toxic emissions from plant malfunctions that have yet to be contemplated.

But the creation of even limited and reasonable restrictions on plant locations could eliminate both the plans of Holnam Inc. in Trident and the Ash Grove Cement in Montana City from consideration for permits. If that's the case, so be it.

It's unfortunate that lawmakers are forced to deal with this issue in reaction to permit applications, the fate of which can have real implications for people's jobs. Nevertheless the lawmakers' mission is to do what is best for the state over the long haul. It is clearly not their mission to conduct a popularity contest for a pair of cement plants.

15  
3-17-93  
SB 338



# JEFFERSON COUNTY COMMISSIONERS

COURTHOUSE, P.O. Box H  
BOULDER, MT. 59632

(406) 225-4251

EXHIBIT

DATE

HB 338

March 15, 1993

Montana House of Representatives  
Natural Resources Committee  
The Honorable Dick Knox, Chairman  
Capitol Station  
Helena, Mt. 59620

Ladies and Gentlemen;

On March 3, 1993, the Jefferson County Board of Commissioners joined our counterparts from Gallatin County in officially endorsing Senate Bill 338.

Our reasons for support are very simple. There are no assurances that can be made, either by the cement plants or by the fuel producers, that the unburned particles that would be entering the community's air and water supplies every year are without risk. Until those assurances can be given, it is simply not appropriate or acceptable to have incineration occurring in a densely populated area that is surrounded by day care centers and an elementary school. The winter inversions that occur in the Helena valley expand the issue to include all of the schools and the population of the entire area, not just our small community.

Despite the statistics of 99.999% destruction, which make incineration in a cement kiln sound more pure than Ivory soap, the seldom-mentioned fact remains that the cement plants intend to burn millions of pounds of hazardous waste fuel every year. The unburned one-thousandth of several million pounds equals several tons of unknown, undestroyed substances being spewn into the neighborhood every year. It is an impossibility for Montana's Department of Health or anyone else to adequately monitor the unburned particles to determine whether or not they are safe.

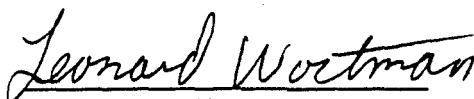
As pointed out in a recent editorial opinion of the *Bozeman Daily Chronicle*, "House leaders should take it upon themselves to ensure a serious discussion on hazardous waste burning facilities' locations." "...the lawmakers' mission is to do what is best for the state over the long haul. It is clearly not their mission to conduct a popularity contest for a pair of cement plants." We could not agree more.

We respectfully urge your support of Senate Bill 338.

Sincerely,



Dave Anderson, Chair  
Jefferson Co. Commission



Leonard Wortman  
Commissioner



EXHIBIT 16  
DATE 3-17-93  
HB SB 338

My name is Christopher Pope. I am the owner and president of The Great Rocky Mountain Toy Company in Bozeman, where I also serve as the Vice President of the Board of the Downtown Bozeman Association.

I wish to thank the members of the House Natural Resources Committee for this opportunity to speak before you today.

I am here to ask for your support of SB 338, which I view as a strongly pro-business, pro-community, pro-Montana bill that is essential to the well-being of employees and to the economic health of the Gallatin Valley.

The Valley is an important contributor to the Montanan economy:

- \* Its 2,100 businesses produce over \$1 billion/yr in goods and services
- \* Its educated, skilled labor force now numbers 30,000, up 25 % in the past two years.
- \* Its economy is broadly diversified—including 850 working farms, the fastest growing tourism sector in the state, a \$500 million retail economy, a vital academic and research community, and many recreational assets that are used equally by Montanans as they are by visitors.
- \* Its access by air, rail and interstate highway to major regional markets make it a key transportation hub for the entire state.

As a businessman, I believe that we need to build and fortify the public trust that every reasonable, available measure is being taken to ensure complete public health as it regards proposed toxic burning cement kilns. In this case, the public trust represents the psychological link to a healthy, sustainable economy. It gives consumers—both Montanans and visitors—the confidence to consume: to buy our agricultural products, to eat harvested wildlife, to swim in our rivers, or to stay a few days in Gallatin Valley on vacation.

I would not be here today if I did not feel an urgent sense that such trust has generally slipped: After extended public debate and overwhelming amounts of scientific data, we are no closer to assurances that anyone—from the regulators to the plant operators—fully understands or controls the toxic waste burning process in cement kilns.

In deliberating the many elements of this issue, I urge you to think about long-term objectives and solutions: Let us make the effort today to build as much protection into the law as possible. SB 338 is both smart and fair in this regard: It simply places our communities, our schools and our water supplies out of harm's potential path. That's good for our citizens, our workers, our children, our visitors—and it is essential to the continued vitality of the economy at large.



ROLAND NORTH AMERICA, INC.

EXHIBIT #17  
DATE 3-17-93  
HB SB 338

March 5, 1993

Mr. John Hamewald  
Box 472  
White Sulphur Springs, Montana 59645

Re: SAS-1 Shredder/Autoclave/Sterilizer in One Step for Medical Waste

Dear Mr. Hamewald:

I would like to take this opportunity to provide you with further information about our non-burn steam sterilization device, the SAS-1.

As you know, the SAS-1 stands for shredding, autoclaving and sterilizing in one step. It is the ideal technology for small, medium sized and large hospitals to address their medical waste processing requirements. The SAS-1 occupies a small space of 10 x 8 ft. and produces a dry, 80% volume reduced, sterilized waste. It generates no dangerous, toxic air emissions or effluents.

The SAS-1 combines in one step two proven technologies in the medical waste treatment. The waste is shredded and sterilized in an autoclave vessel. The automatic cart feeder dumps the waste into the vacuum feed autoclave where the waste is exposed to saturated steam at 276°F at 31 psig, and shredded simultaneously for a minimum time of 30 minutes. Prior to ejection the waste is exposed to a final vacuum phase and thereby dehydrated. The waste product emerges sterile, 80% volume reduced, non-recognizable and dry. A micro-processor controls the entire process whereby the load, weight, and operating parameters are continuously monitored and available on a printed record. Air and steam emissions are processed through a HEPA filter and a series of activated carbon filters.

No designated labor is required as the waste handler simply positions the cart on the automatic lifting device and pushes a button. The unit is manufactured in Houston with all American components. This warrants easy availability of spare parts and service.

The SAS-1 is a further development of our well established larger unit, the ZDA-M 3, which has been operating in Europe since 1986 and in the U.S. since 1992.



Page 2

Steam sterilization and autoclaving is a well accepted concept in the health care industry and will require no specific approval process in most states.

The plastic content of waste output from the ZDA-M 3 as well as the SAS-1 can be recycled into plastic shapes through our proprietary technology. We expect the first system of this kind to be installed at the Mayo Clinic in Rochester, MN by mid year. The medical waste will leave Mayo Clinic's plant in the form of plastic pallets and other consumer products.

A brochure is enclosed for your information. I would be very happy to discuss with you how our technologies can be of assistance in your clients' waste processing requirements.

With best regards,

A handwritten signature in cursive script, appearing to read 'Otmar Kolber'.

Otmar Kolber  
President

OK:ct

Enclosure: SAS-1 brochure

HB 338  
DATE 3-17-93  
EXHIBIT #18

TESTIMONY SUBMITTED TO THE HOUSE NATURAL RESOURCES COMMITTEE

SB 338--Hearing Date: Wednesday, March 17, 1993  
Hart Building Auditorium

Mr. Chairman, members of the committee, my name is Greg Van Horssen. Although I have appeared before many of you in different committees and on different issues, I appear before you this morning as an individual on behalf of myself, my family, and my neighbors. I strongly support Senate Bill 338 and urge each member of this committee to do the same.

As you have already heard from this morning's previous testimony, the Environmental Protection Agency has admitted that the burning of hazardous wastes in cement kilns poses an unknown risk to health. Additionally, recent studies have indicated that, in spite of the purported efficiency of the incineration process, certain highly carcinogenic compounds such as dioxins and furans can be produced in the incineration process. These compounds are known byproducts of the process and are known to be carcinogenic. The long and the short of it is that we do not know how the burning of hazardous waste will affect our health or the health of our children in the long run.

I have continually heard throughout this legislative process from the proponents of this bill the phrase "let us prove it." Well, ladies and gentlemen, what if the industry is allowed to "prove it"? And what if the process does not work? The fact is, if the process does not work, it will be too late. If the process does not work, our environment will be seriously and probably irreparably harmed and the health of all Montanans

living, working, or attending school or day care in the proximity of the plant will be threatened.

To allow the industry, which stands to profit greatly under this process, to "prove it" after knowing the potential risks of allowing this process to occur in the proximity of human populations or open water is simply unreasonable and would amount to a monumental disservice to Montana's citizens and our environment. The risk of upset, inefficient burning, the release of heavy metals into the environment, or the risk of an accident in the transport of the hazardous fuel, no matter how small, must guide you to support Senate Bill 338.

On the "let us prove it" issue, if I may, I would like to offer for the committee's consideration an analogy: I would like to suggest at this time that each member of the committee follow me outside of this meeting room, at which time I will provide each of you with an apple. I will ask each of you to walk 100 yards downrange and place the apple on your head. At that time, I will use a rifle to shoot the apple off of your head. Now ladies and gentlemen of the committee, I am a marksman and I assure you that I will be able to shoot the apple off of your head without causing any harm to your person. Let me prove it. But the question is, ladies and gentlemen, what if I am mistaken. If I am mistaken, it is too late, the damage will have been done, and there is nothing that I will be able to do to rectify my error.

Members of the Natural Resources Committee, please do not gamble with our health and the health of our children. Members of the Natural Resources Committee, please do not gamble with Montana's future. I urge your strong support to Senate Bill 338.

Thank you for this opportunity to address this committee.

Gregory A. Van Horssen

GVH/jb

EXHIBIT 18  
DATE 3-17-93  
SB 338



## TRI MOUNTAIN ANGUS

Buzz and Pat Field

Rt. 1 Box 88 - Townsend, Montana 59644

Phone (406) 266-3740

HB 338  
DATE 3-17-93  
EXHIBIT #19

Mr. Chairman and members of the committee my name is Lester Field. Two generations of us live and cattle ranch outside of Townsend, MT. Unlike the paid lobbyists for the waste disposal companies it is very difficult for us who oppose them to tear away from our livelihoods and come to you to be heard. I have come today to urge you to favorably consider SB338 and SB339, especially SB338. It is the best piece of proposed legislation to protect us from the damage to our environment and our people from the burning of hazardous waste.

I feel this matter is the most important of any before this session of the legislature. More important than the Sales Tax, more important than how and when we balance the budget, and certainly more important than bison hunts, coffee breaks and other such matters. Because if these waste disposal companies once are allowed to start up it will be irreversible. We will have lost the battle. The importation of hazardous waste will escalate and if then we do wake up to what we have done or failed to do it will be too late to enact protective legislation. The companies will take the challenges to court and they will win. It is now or never for us.

I submit to you that it is time for Montanans to wake up because time is running out for the Montana that we know and love if you don't enact legislation

EXHIBIT 19  
DATE 3-17-93  
SB 338



now to protect us. Do you really believe the profit oriented waste industries claims of how safe it will be? Do you really believe their lobbyists at least one of whom poses as an "environmentalist" and one of whom has stated that one could live on an emission stack 24 hours a day for 70 years with no measurable ill-effect? It is more than frustrating for us to see some of you apparently taken in by and even seem to court these representatives of an industry that is by its very nature unsafe and unclean. If some area economies within our state are weak at this time seek out and pursue clean industry. It is false economy to let the waste industry in with its obvious risks only to harm our blossoming tourist industry and put at risk our old and venerable agricultural economy. Not to mention our health and the quality of our lives.

I strongly feel that we only have this one chance to keep our state from becoming an easy target for the toxic waste disposal industry. Initially the cement plants, ethanol plants, etc. will become fronts for the lucrative waste disposal business. And if our laws and regulatory process prove too lax and ineffectual they won't even bother with these fronts— just bring in the garbage and dispose of it as they see fit. For example which state or states do you think will become the recipients and disposal areas for the vast and now largely unwanted chemical weapons arsenal of the U.S.A.? Why the states with the weakest laws and regulatory process of course. That stuff should make dandy cement.

Assuming you do enact sufficiently protective legislation to protect the citizenry, there are many of us who feel that the Montana Department of Health and Environmental Sciences as we got to know it last summer and fall at town

meetings and in these halls will be part of the problem rather than part of the solution. Their representatives' attitudes so far have been an arrogant lack of concern for the public interest in these matters. They seem to be completely on the side of the waste burning companies. I suggest there be a thorough house cleaning within this department. Self policing by the industry to maintain whatever standards you enact will be a joke and I fear policing by our state will be little if any better.

I happen to be a registered Republican. Our party is traditionally the party of big business. This time their interests and the interests of the majority of our citizens (even if <sup>some</sup> ~~they~~ do not yet realize it) are in terrible conflict. I also know some of you Republican legislators are concerned about your local economies. Please try to find and court clean industry to bolster your area economies. This is your opportunity to show that you are sensitive to the long-range welfare of the citizens of this state when our interests are in conflict with those of big business. Please come across and join with the Democrats many of whom care about us and vote yes on SB338. It is really the only chance we have. We wish we had tougher proposed legislation to deter the disposal of imported waste within our state; but we do not.

So it is really up to you and the outcome if negative for the people of Montana and our heirs will rest squarely on your shoulders.

Thank you.

Lester L. Field - family

19  
3-17-93  
SB 338

# SUPPORT THE SITING ACT FOR HAZARDOUS WASTE BURNING

EXHIBIT 80  
DATE 3-17-93  
HB 50338

We, the undersigned concerned citizens oppose the burning of toxic or hazardous waste near schools, residences, and public water supplies. And, we oppose the proposed burning of hazardous or toxic wastes (Chem Fuel) by Ash Grove Inc. at the Montana City cement plant.

We request that the State Legislature, the Governor and the Montana Department of Health & Environmental Sciences adopt a hazardous waste disposal facility siting process which includes minimum distances that such facilities can be located from schools, residences and public water supplies.

SIGNATURE	PRINTED NAME	ADDRESS	CITY / ZIP	TELEPHONE
<i>[Signature]</i>	Grossberg	1615 Stuart	Helena 59601	442-1215
<i>[Signature]</i>	Atkins	1122 5th Ave	Helena	442-5339
<i>[Signature]</i>	WEEKS	Box 166 MCR	Clancy 59634	443-5256
<i>[Signature]</i>	Blakzyl	St. Rt. Box 112	Clancy 59634	443-1354
<i>[Signature]</i>	R. Meierhenry	Box 835 Sawmill Rd	Clancy 59634	442-9805
<i>[Signature]</i>	DEBBIE WOOD	Box 831 MCR	Clancy MT 59634	449-5513
<i>[Signature]</i>	STEVE WOOD	"	"	"
<i>[Signature]</i>	Lori CARLSON	574 Sawmill Rd	Clancy MT 59634	443-0622
<i>[Signature]</i>	DAVID CARLSON	874 Sawmill Rd	Clancy MT 59634	11 11 11
<i>[Signature]</i>	Sarah STEVENS	586 Sawmill	Clancy MT	449-4802
<i>[Signature]</i>	Denise Christoffersen	Box 160 Sawmill	Clancy	443-5841
<i>[Signature]</i>	Paul Christoffersen	" " "	"	" "
<i>[Signature]</i>	Gina Murto	Box 876 MCR	Clancy	442-9252
<i>[Signature]</i>	Marty Murto	Box 876 MCR	Clancy	442-9252
<i>[Signature]</i>	Kelly Calnan	Box 879 MCR	Clancy	443-4180
<i>[Signature]</i>	Joanne Hall	SR Box 145	"	442-0354
<i>[Signature]</i>	ELIZ HALL	S.R. Box 131	Clancy	442-0665

This document is stored at the Historical Society at 225 North Roberts Street, Helena, MT 59620-1201. The phone number is 444-2694.

<i>[Signature]</i>	Eric Schaff	SR Box 113	Clancy MT	3-3526
<i>[Signature]</i>	TERRI DONAKSON	Box 865 MCR	Clancy, MT	449-4960
<i>[Signature]</i>	David J Blodgett	SR Box 116 MCR	Clancy, MT	443-4903
<i>[Signature]</i>	Bail H Blodgett	SR Box 116 MCR	Clancy MT	443-4903
<i>[Signature]</i>	Shelton	Box 718	Helena MT	449-1421
<i>[Signature]</i>	Jo Hill	Box 118	Clancy MT	443-6433
<i>[Signature]</i>	Kurt Hill	Box 118	Clancy MT	443-6433

EXHIBIT 119  
DATE 3-17-93  
HB SB 338

**PASSAGE OF A MONTANA SITING ACT FOR  
FACILITIES BURNING  
HAZARDOUS WASTES IS NECESSARY TO  
PROTECT PUBLIC HEALTH**

---

**SB 338 - A COMMON SENSE SITING ACT**

\* *The Dangerous Waste Incinerator Siting Act (SB 338) is a siting act, which simply requires that facilities that burn these dangerous substances be located where they will be less likely to threaten the health of Montana citizens. It is not a ban on hazardous waste burning. It also protects Montanas agricultural and tourism industries. This is a reasonable and prudent proposal that transcends party lines. Montana legislators have a responsibility to act in the best interests of the people, and should join other Western legislators by providing hazardous waste facility siting criteria.*

\* Utah, Nevada, Washington, Oregon, North Dakota, Texas, Colorado, and Idaho all have state mandated siting criteria. There is no justification for importing thousands of tons of hazardous and toxic wastes from other states without first providing for the safety of Montanans by passing SB 338.

**ASH GROVE PROPOSAL**

\* The Ash Grove cement plant is located less than one mile east of Montana City, on the banks of Prickly Pear Creek. The Montana City School is located one-half mile from the Ash Grove smokestack. Hundreds of family residences are located immediately surrounding Ash Grove. The City of Helena lies 5 miles to the northwest. The City of East Helena is less than 4 miles to the north. Clancy, Montana is 6 miles south of the cement plant.

\* Ash Grove Cement has applied for an EPA permit to burn 30,000,000 pounds per year of over 475 different kinds of industrial waste classified by the EPA as hazardous or toxic. The Ash Grove permit application includes such highly toxic substances as arsenic, lead, mercury, cadmium, chromium, benzene, nitrobenzene, chlordane, 2,4-D, o-cresol, endrin, pentachlorophenol, and many more. (August, 1991, Ash Grove EPA application for hazardous waste permit.) Many of these compounds are known carcinogens; many others have been designated "extremely hazardous substances" and/or "toxic waste" by the EPA. (40 C.F.R. §261.30; EPA designations pursuant to the Superfund Amendments and Reauthorization Act.) All of them have been classified as hazardous. (40 C.F.R. §261.3, 40 C.F.R. subparts C and D.)

\* Ash Grove plans to have an average of three semi-trucks per day carrying hazardous and toxic waste to Montana City. Accident probability analysis for an average size cement kiln predicts there will be a major toxic spill every five years. (Murphy and Thomas, "Risks Associated with Waste Fuel Use in Cement Kilns," Environmental Progress III:1 2/84.)

**CEMENT KILNS CANNOT SAFELY INCINERATE**

(\*) \* "EVERY test burn of cement kilns incinerating hazardous waste as reported in the technical literature fails to meet EPA RCRA standards for hazardous waste incineration." (C. Trine, Incineration Technology: Cement Kilns Inherently Unsafe, 6/91 [hereafter cited as "Trine, 6/91"].)

\* Destruction of hazardous wastes by incineration requires adequate amounts of time, temperature, turbulence, and oxygen. (Trine, 6/91.) Unlike hazardous waste incinerators, cement kiln incinerators like Ash Grove's were specially designed for the sole purpose of producing cement. Although cement kilns provide adequate temperatures for combustion, they do not do so for an adequate period of time for complete combustion, and they do not provide adequate amounts of oxygen and turbulence to ensure maximum combustion. (Edward Kleppinger, Ph.D., Richard A. Cames, M.S. "Cement Incineration of Hazardous Waste: A Critique," 9/90, p.43 [Hereafter cited as "Kleppinger, Cames, 1990"].) As described by one EPA employee, "cement kilns tend to have a long lazy flame that could hardly be described as 'turbulent' compared to a hazardous waste incinerator ... temperatures do drop off rather quickly." (Peter, S.P., et al., "Hazardous Waste as Supplemental Fuel for Cement Kilns: Discussion," Proceedings of the National Waste Processing Conference, ASME; Denver, CO 1986).

\* Cement kilns which burn hazardous wastes are particularly susceptible to "upsets," the sudden release of high levels of unburned hazardous compounds into the atmosphere. "Upsets during the operation of cement kilns are common and can be of such intensity and duration as to lead to explosive gas mixtures going up the stack." (Trine, 1991.) In the summer of 1991 two persons were injured at Ash Grove when a piece of the kiln exploded; a week earlier a pipe exploded, injuring another. (Independent Record, August 8, 1991.) In June of 1990 the EPA designated Ash Grove "a significant offender" of air quality standards governing particulate emissions. (Independent Record, 6/14/90.) In August of 1990 Ash Grove illegally released a massive spill of "limestone slurry" into Prickly Pear Creek, prompting a State Water Quality Bureau Specialist to state, "I'm confident this company has slipped behind in environmental protection. ... They've trashed that creek." (Independent Record, 8/18/90.)

\* In short, cement kilns have inherent design limitations which render them unable to safely, consistently and completely burn hazardous wastes. (Trine, 1991; Kleppinger, Cames, 1990.)

### **INCOMPLETE COMBUSTION CAUSES MORE TOXIC WASTES**

\* Particles of incomplete combustion (PICs) of hazardous wastes results in the emission of the waste in its original form, or in a recombination of substances. PICs are "more difficult to destroy and may be more toxic than the parent compound," according to the EPA. (USEPA, Environmental Effects, Transport, and Fate Committee, Science Advisory Board, "Report on the Incineration of Liquid Fuel Wastes" April, 1985.) Only 1 to 10% of the PICs known to be present in the stacks of hazardous waste incinerators have even been identified! (EPA Science Advisory Board, 1985).

\* Particularly dangerous PICs formed during incineration of wastes are dioxins and furans, which are extremely toxic, and persist in the environment for long periods of time. (Trine, 1991.) Dioxins are the most powerful carcinogens ever tested in laboratory animals. (Rachel's Hazardous Waste News #314, Environmental Research Foundation, 12/2/92 [hereinafter cited as "Hazardous Waste News #314".]) PICs such as dioxins are released in the kiln's stack gases, kiln dust, and cement products. (Trine, 1991.) Kiln dust is a high volume by-product of cement production, which is exempt from the federal law regulating hazardous waste. (Resource Conservation and Recovery Act.) According to the EPA, about 6 million tons of kiln dust is disposed of each year by cement kilns.

\* 1992 EPA tests of cement kilns fueled by hazardous waste and other kilns using conventional fuels, showed that only the hazardous waste kilns produced kiln dust containing a particularly deadly dioxin molecule known as 2,3,7,8-TCDD. Kiln dust from the kilns burning hazardous waste also contained benzene and acetonitrile, both toxic chemicals. (EPA internal briefing document of 10/8/92, to Sylvia Lowrance, Director of Solid Waste, reported in Hazardous Waste News #314, and "The Nation," 3/3/93 pp. 307-08.) The surprising results from the 1992 tests have prompted a second round of cement kiln testing by the EPA in 1993.

### **TOXIC EMISSIONS EVEN WITH COMPLETE COMBUSTION**

\* Toxic metals are not destroyed or detoxified at all by incineration. When they are incinerated as hazardous waste, they are simply redistributed through air emissions, kiln dust, and concrete. (Trine, 1991.) A 1990 cement company study found an average of 1.5% heavy metal content in the hazardous waste it burned. (Stein, D. and J. Lowe, "Health Risk Assessment: Increased Liquid Waste Fuel Firing in the Lebec Cement Kiln, Vol. I:Report," prepared for the National Cement Company, 4/90.) 1.5% of the 15,000 tons of hazardous waste Ash Grove plans to burn annually yields a heavy metal content of 450,000 pounds per year!

\* Metals that vaporize at high temperatures, such as lead, mercury, cadmium, nickel, and zinc (all of which are listed in Ash Grove's EPA permit application) leave the flame zone of cement kilns as gases, and preferentially condense onto the smallest particulates (less than 2 microns) in the stack. Particulates of this size are most likely to escape pollution control devices, and most likely to escape the human body's defense mechanisms and lodge deep in the lungs. (Trine, 1991; Pope, C.A., "Respiratory Disease Associated with Community Air Pollution and a Steel Mill, Utah Valley" American Journal of Public Health, 5/89, 79:623-628.) Lead is a human carcinogen linked to lung and kidney cancer. Nickel, mercury and cadmium are known or suspected carcinogens. Lead and zinc are known to cause neurological and pulmonary damage at very low doses, particularly in children and human embryos.

## **CEMENT KILNS ARE NOT A SOLUTION**

\* Montana does not need the burning capacity of cement kilns to dispose of hazardous wastes, and even if it did, cement kilns cannot do the job safely. According to the Montana Department of Health and Environmental Sciences (MDHES), Montana's hazardous waste generation for 1991 was 13,605 tons, of which 7,215 tons were disposed of out-of-state. The rest was dealt with in-state through treatment and recycling. Montana has a regional agreement with other Western states for hazardous waste disposal capacity assurance. The Holnam cement plant at Three Forks and Ash Grove propose to burn a total of about 60,000 tons of hazardous waste annually. Thus even if all 7,215 tons of available waste from Montana were diverted to the kilns, there would only be enough to provide 12% of the amount required by both plants. The remaining 88% (52,800 tons!) will be imported from out-of-state. Last month, after months of study, the Texas Air Control Board found that Texas does not need its cement plants to adequately dispose of that state's hazardous wastes.

\* Even if it were true that there is a waste disposal problem in Montana, cement kilns simply redistribute much hazardous waste they are burning into the environment, which is a poor "solution" to the problem of hazardous waste disposal. Allowing Ash Grove to burn hazardous wastes at the risk of thousands of Montanans might result in the addition of 6-10 more jobs at their plant.

## **REGULATIONS INADEQUATE**

\* The EPA does not require cement kilns to meet the same stringent requirements imposed on commercial hazardous waste incinerators under the Resource Conservation and Recovery Act (RCRA), the nation's basic hazardous waste law. Under RCRA regulations, commercial hazardous waste incinerators are required best available technology to their operations. Yet, pursuant to a loophole in federal regulations, cement kilns in Montana are proposing to incinerate the same hazardous wastes burned in commercial incinerators, using ineffective technology in kilns designed and constructed decades ago, for the sole purpose of producing cement. The MDHES regulations are also inadequate, since they adopt for the most part the EPA regulatory scheme. A glaring inadequacy in the MDHES regulations is a complete lack of siting requirements for cement kilns proposing to burn hazardous wastes. Finally, MDHES has a record of poor enforcement capacity, and that capacity will be further weakened if funding cuts now proposed by the Legislature are adopted. Even if the MDHES regulations were adequate, citizens are not protected by an agency without enforcement power.

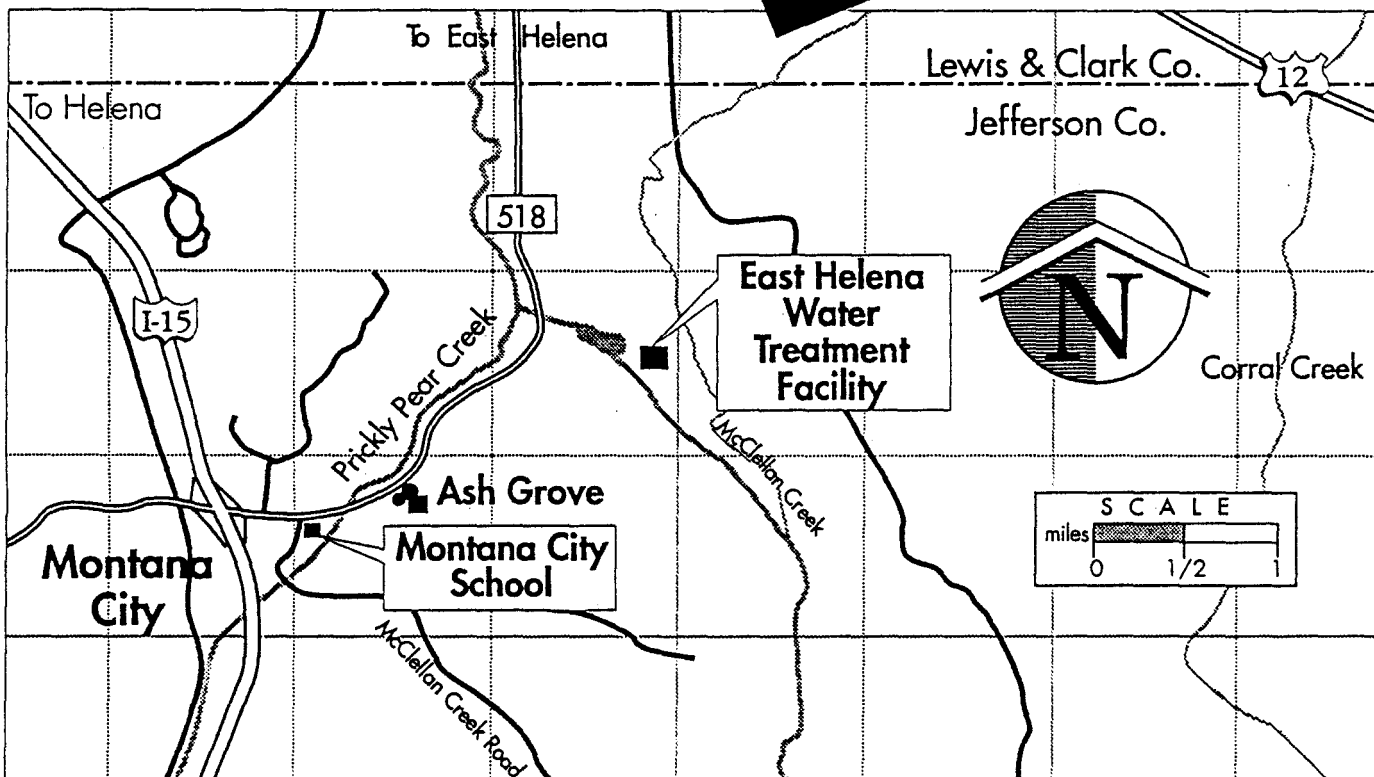
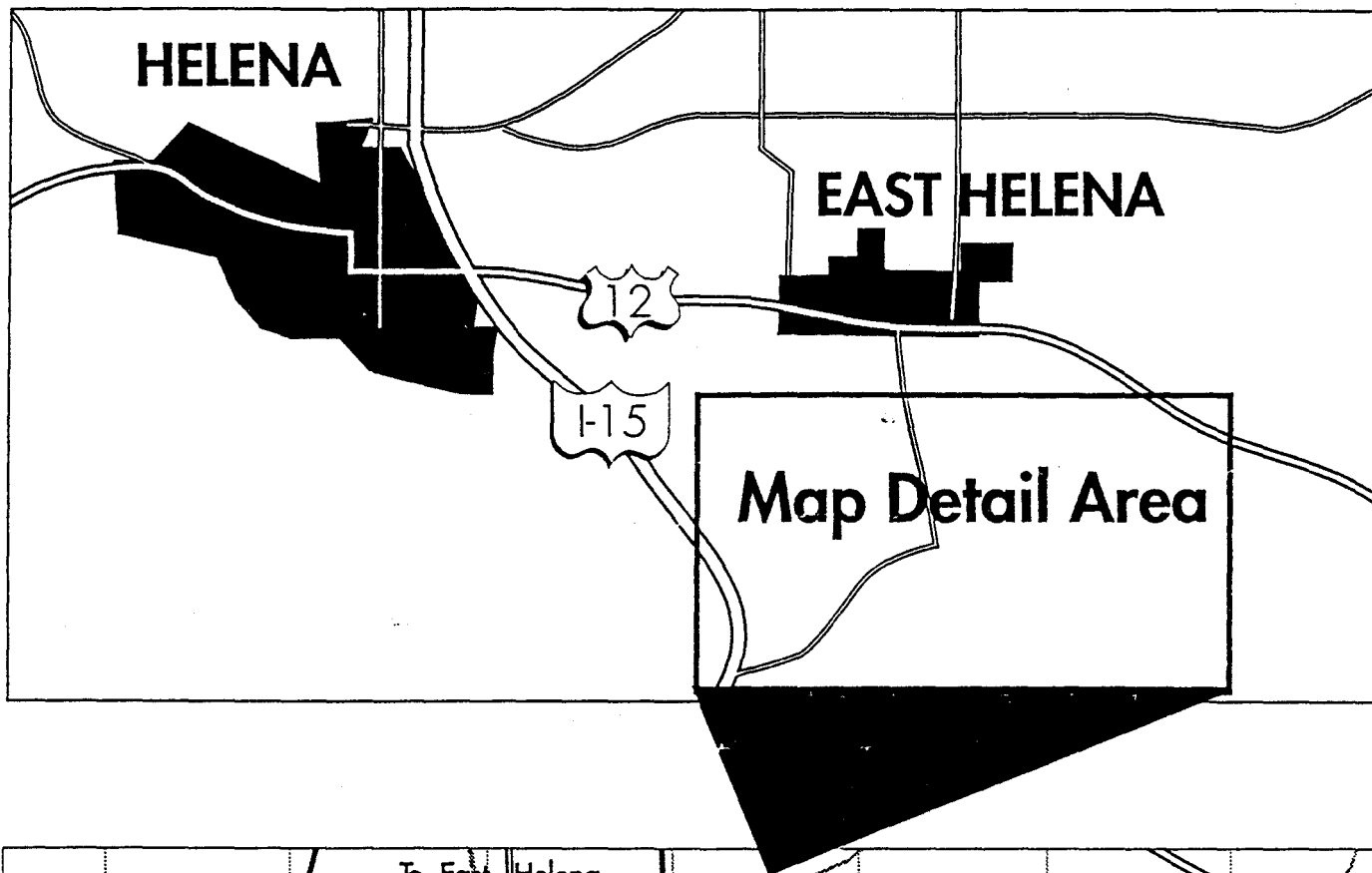
## **CONCLUSION**

*\* The health of thousands of Montana citizens is at stake. The Montana Parent Teacher Association, the Jefferson County Commissioners (Ash Grove is located in Jefferson County), the Montana City School Board, and over 55 Helena area doctors have all endorsed SB338. Please protect our health by voting for SB 338!*

**This fact sheet is provided by NEIGHBORS OF ASH GROVE**

For More Information, Call: 449-3424, 443-0792 or 442-4467.

EX-100 19 a  
DATE 3-17-93  
SB 338



# HOW WELL ARE WE PROTECTED?

DATE 3-17-93  
SB 338

The regulations listed apply to all kilns that have applied to EPA before 8/21/91 to burn Hazardous Waste as fuel  
 Comparisons of Federal EPA Requirements for Regulated Incinerators and Kilns using Hazardous Waste

ITEM	Incinerator	Kiln
Ability to adequately upgrade to new technology, e.g., oxygen enhancement	YES	.NO
Acid scrubbing requirements	YES	.NO
Afterburner: design to assure destruction of Hazardous Waste	YES	.NO
Access roads maintained for traffic capability under adverse weather conditions	REQUIRED	.NO
Automatic waste feed cutoffs required	YES	.NO
Closure/financial guarantees/liability insurance required	YES	.NO
Combustion zone pressure monitored and recorded on a continuous basis	YES	.NO
Complete RCRA destruction and removal efficiency (DRE) of 99.99%	REQUIRED	.NO
Contamination clean-ups and trial burns required	YES	.NO
Continuous stack monitoring required	YES	.NO
Design/Controlled feed to minimize upsets	YES	.NO
Design for Flame Stability	YES	.NO
Emergency plans and information for police, hospitals and fire required	YES	.NO
Flood protection plans required	YES	.NO
Hazardous waste manifests for residues buried on-site required	YES	.NO
Hydrogen Chloride Max. emission of 4 lb/hr or 99%	REQUIRED	.NO
Landfill permit for residues buried on-site required	YES	.NO
Limits on qualities of Hazardous wastes burned required	YES	.NO
Location limits required	YES	.NO
Mandatory Public hearings for permit decisions	YES	.NO
Mandatory Public hearings for permit changes	YES	.NO
Mandatory Public information on types and amounts of wastes burned	YES	.NO
Operating controls for low-high combustion temperature	REQUIRED	.NO
Operating controls for excess waste feed	REQUIRED	.NO
Operating controls for excess carbon monoxide	REQUIRED	.NO
Part B RCRA Permit for incineration	REQUIRED	.NO
Particulate emission of .08 grains/dry cubic foot	YES (Often .015)	.NO
Permit life limited	YES	.NO
Personnel emergency communications or alarms required	YES	.NO
Public reporting on wastes received and shipped required	YES	.NO
Removal of at least 99.9999% of PCB's required	YES	.NO
Risk assessments of emissions of Cadmium, Mercury, Lead, Selenium	REQUIRED	.NO
Secure land-fill disposal/treatment of ash	REQUIRED	.NO
Security and Safety inspections required	YES	.NO
Special training for personnel required	YES	.NO
Specialized equipment and personnel for destruction of Hazardous Waste	REQUIRED	.NO
Storm Water control structures constructed to prevent washout by a 100-year flood	REQUIRED	.NO
Testing and maintenance of emergency equipment required	YES	.NO
Time, Temperature, and Turbulence optimized for complete incineration of Hazardous waste	YES	.NO
Treatment residues are handled as Hazardous Waste	REQUIRED	.NO
Waste analysis required	YES	.NO

W H O ' S B U R N I N G W H O ?



## Hazardous Waste Incinerator Siting Criteria in 11 Western States

	UT	NV	WA	OR	WY	SD	ND	TX	CO	ID	MT	Total	MT
State mandated siting criteria	X	X	X	X	a	b	X	X	X	X	c	10	d
Distances specified	X	X	X	X	a			X	X			7	X
Capacity Needs Assessment				X		X	X	X				4	
Homes, schools, towns, gathering places	X	X	X	X	X			X	X	X		8	X
Population density				X					X			2	
Parks, recreation areas	X	X	X	X				X				5	X
Airports				X								1	
Surface water	X	X	X	X	X			X		X		7	X
Ground water/wells	X	X	X	X	X		X		X	X		8	X
Flood plains (100/500 year)	X	X	X		X			X				5	X
Wetlands		X	X		X							3	X
Aquifer recharge zone	X						X			X		3	
Precipitation levels			X									1	
Farmlands- prime/unique	X		X									2	X
Soil permeability			X				X		X			3	
Faults (Holocene, "active")	X			X	X			X		X	X	6	X
Mudflow, earth movement	X			X								2	X
Other geological features	X	X			X							3	
Dam failure, flood areas	X											1	X
Avalanche areas					X							1	
Wilderness/wilderness study areas	X		X	X								3	X
Wild & Scenic Rivers	X		X	X	X							4	
Sensitive/unique areas				X								1	
Endangered species habitat and/or big game range	X	X			X							3	
Historical/archaeological sites	X		X	X	X							4	
Viewsheds				X								1	
Highway setbacks (state/federal)					X							1	
Transportation risks								X				1	
"Climactic conditions"									X			1	X
"High topographical relief"							X					1	
Air quality concerns			X									1	
Where poses concerns for cancer and/or "chronic toxic effects"					X							1	
Local zoning/controls			X	X				X	X			4	X
Setbacks from property lines				X				X		X		3	
State Dept. of Environment/Health handles permitting		X	X	X	X	X	X	X	X	X	X	10	X
Appointed committee or board handles permitting	X											1	

- a) Mandated, currently being drafted.
- b) In process; information based on S.D. Citizens' Advisory Committee on Hazardous Waste Management, Executive Report and Recommendations, July 1992. Specific criteria are beyond the scope of the Committee. However, recommendations for "geological, biological and human considerations" are suggested.
- c) At this time, only federal standards apply to Montana; there is a single criterium under these standards.
- d) Proposed under SB 338.



## TRI MOUNTAIN ANGUS

Buzz and Pat Field

Rt. 1 Box 88 - Townsend, Montana 59644

Phone (406) 266-3740

HB 338  
DATE 3-17-93  
EXHIBIT #19

Mr. Chairman and members of the committee my name is Lester Field. Two generations of us live and cattle ranch outside of Townsend, MT. Unlike the paid lobbyists for the waste disposal companies it is very difficult for us who oppose them to tear away from our livelihoods and come to you to be heard. I have come today to urge you to favorably consider SB338 and SB339, especially SB338. It is the best piece of proposed legislation to protect us from the damage to our environment and our people from the burning of hazardous waste.

I feel this matter is the most important of any before this session of the legislature. More important than the Sales Tax, more important than how and when we balance the budget, and certainly more important than bison hunts, coffee breaks and other such matters. Because if these waste disposal companies once are allowed to start up it will be irreversible. We will have lost the battle. The importation of hazardous waste will escalate and if then we do wake up to what we have done or failed to do it will be too late to enact protective legislation. The companies will take the challenges to court and they will win. It is now or never for us.

I submit to you that it is time for Montanans to wake up because time is running out for the Montana that we know and love if you don't enact legislation

EXHIBIT 19  
DATE 3-17-93  
SB 338

COMMENTS TO TACB CEMENT KILN TASK FORCE

NOVEMBER 20, 1992

I want to express my appreciation to all members of the Task Force for their time, energy, effort and expertise to develop public policy on this very complex issue. At this time I would also like to present petitions with over 11,000 SIGNATURES requesting PROHIBITION of the practice of BURNING HAZARDOUS WASTE IN CEMENT KILNS.

A few moments ago one of the gentlemen of the Task Force asked "What are we going to do with these tires if we do not burn them?" I would far rather see them chipped up and placed back into the dumps RATHER THAN WEAR THEM IN MY LUNGS. Commercial incinerators, such as Rollins toured by the Task Force, are having to spend millions purchasing high B.T.U. fuels. My question is, WHY NOT BURN THE TIRES IN THOSE INCINERATORS WHICH ARE DESIGNED AND REGULATED TO PROTECT HUMAN HEALTH?

Unfortunately government agencies today primarily look only at the risk of Cancer and there are so many more risks to be considered, such as IMMUNE SYSTEM AND REPRODUCTIVE DISORDERS.

For the past 24 years my husband and I have been breeders of national champion lineage Arabian Horses in Midlothian. Our farm was always known for it's excellent conception rate. We bred, raised, sold and showed these horses all over the country.

Approximately five years ago, we began noticing abnormalities with some of our stock:

- . Excessive fatigue while being worked which required the animal to be placed on thyroid medication.
- . Mares experiencing hormonal irregularities, ovarian cysts which required hormone therapy and/or surgery. One mare died after surgery due to the fact her blood refused to coagulate.
- . Multiple follicle ovulation (release of more than one egg to be fertilized) causing multiple births and twinning which normally results in death of all foals.
- . Spontaneous premature delivery, foaling early without making a milk bag (this usually starts 4 to 6 weeks before delivery).
- . Delayed sexual development.
- . Chronic glandular inflammation of horses under the throat and where the head joins the neck.

Page 2

Comments to TACB Cement Kiln Task Force  
November 20, 1992

- . Uncommon muscular line on side of abdomen, explained by veterinarian, Dr. Tom McLaughlin, as development due to increased effort to breathe.

Personal adverse health problems began to mount with both myself, my husband, other members of our family and citizens in the surrounding area.

This year we bred five mares and all five have lost their foals. I would like to read a short letter by a veterinarian who started his practice in the area approximately three years ago.

(COPY OF LETTER INCLUDED WITH THESE COMMENTS)

What was once a very productive effort has become an impossible task. Nothing different has been done on our part, so one must logically conclude there has been an extreme alteration of the surrounding environment.

Thank you for the opportunity to comment and I have booklets of other citizens' comments which will be mailed to Task Force members.



Sue Pope  
476 Hidden Valley Trail  
Midlothian, Texas 76065  
214-299-5298

## Cement Kiln Task Force

When we lived in Midlothian on Tar Road, I had migraine headaches at least 3 times a week. Occasionally these would slack off for a very short period.

I had a lot of hormonal problems, which ended up requiring that I have a hysterectomy at age 29. The headaches remained until we moved in August. I still have an occasional headache, but not nearly as often. I also had Fibercystic disease when we lived in Midlothian, but have not experienced any recurring symptoms since then.

My son, 5 1/2 years old, whom I carried while we lived in Midlothian was born jaundice. He was always a fussy baby. As he grew older he didn't have a lot of energy to play - he would just lay around. He was still grumpy. He didn't have a lot of muscle tone. He had a difficult time riding his bike. He also had headaches frequently. His hair was a very coarse fuzzy texture and it would hurt to brush or cut.

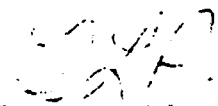
My other son, 8 years old, had a sore throat often and chronic strep throat. He also had dark circles around his eyes, and he had sinus problems.

My younger son no longer is such a fussy child and loves to run and play outside now. His hair is also a different (better) texture.

The older son also has had less problems with his throat and more circles.

We also had horses there, all of the mares had a problem with cysts on their ovaries and very mean streaks (PMS). Even the male horses acted like stallions after they had been gelded for a long while. One gelding had to take hormone shots to calm him down. The mares were also had to take hormone shots. One of my horses died of colic when his gut shut down.

Since we have moved, my three mares are fine, they have not been experiencing any hormone problems.

  
Terry Atchison  
P. O. Box 514



MOBILE ANIMAL CARE CLINIC

P.O. BOX 991

CEDAR HILL TX 75104

TELEPHONE: (214) 676-1322

November 19, 1992

Mrs. Sue Pope  
Hiddden Valley Arabians  
Midlothian, TX. 76065

From 1989 to the present, 5 different owners and 10 horses along the stretch of Knight dr. east of Tarr road to where it dead ends have had a large number of reproductive problems. All ten mares have had two or more cases of cystic ovaries, decreased conception rates, one case of aborted twins, one case of a mule foal that had an enlarged bladder. This appears to be an abnormally high incidence of reproductive problems for such a small area and population of horses.

Sincerely,

  
Mikel L. Athon D.V.M.

EXHIBIT 20a

DATE 3-17-93

SB 338

November 15, 1992

To Whom It May Concern:

The following information deals with the health problems of myself, my friends, and my animals/livestock that I have experienced since I began living at 551 Knight Street off Tar Road, between Cedar Hill and Midlothian.

During this time, I have been diagnosed and treated for Toxic Shock Syndrome, Graves Disease, Benign Tumor of the Uterus (surgically removed during complete hysterectomy), Mononucleosis, Bronchitis, Walking Pneumonia, and Chronic Laryngitis. The other person who shares my home has been diagnosed and treated for Walking Pneumonia, Bronchitis, Chronic Fatigue Syndrome, and numerous Respiratory Infections.

I have had spontaneous abortion in broodmares, full-term foals born dead (necropsy showing no physical medical reason for death), foals born with severe intestinal impaction (required - hours emergency surgery), foals die of strange bladder enlargements that the veterinary medical community has never seen or heard of before, horses develop hypo-thyroidism (have to take daily medication), horses develop Graves Disease (have to take daily medication, mares develop recurring ovarian cysts which must be treated with hormone therapy or surgery, or both.

I have had several cats and dogs which were innoculated against every malady known to veterinary medicine die from mysterious causes, whose laboratory tests showed nothing.



Tex Low  
551 Knight Street  
Cedar Hill, Texas 75104  
214-291-3614

209  
3-17-93  
56 338

November 13, 1992

To Whom It May Concern:

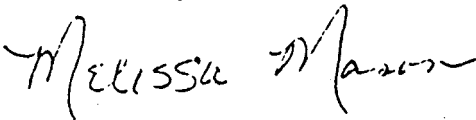
I would like to take a few minutes of your time to express my feelings regarding the environmental issue in Cedar Hill, Texas and surrounding communities. I feel this is a serious problem which can no longer be ignored as it has not only affected, but cost the lives of many in the area. If left unchecked this problem of burning and dumping toxic waste will only get worse and ultimately affect everyone, not just those in this area. The companies involved must be made to adhere to the laws regarding the burning of toxic waste.

During the time I lived in Cedar Hill, I suffered from various ailments which included frequent headaches, shortness of breath, mouth sores and stomach problems. I never questioned why I had these problems nor sought professional help as I thought these were minor ailments caused by stress or diet and could be remedied by myself. My horses were also affected it seems, as they had continual colds and frequent swelling in their glands (for which I could find no reason.)

Since we moved to Grandview in 1990, my horses have not been sick one time and the swelling in their glands has disappeared. Not only that but I no longer have stomach problems or mouth sores. As I have not changed mine or my animals eating habits I can only conclude that these problems were not diet related but caused by something else.

It has recently come to my attention that there are many other people in the Cedar Hill and surrounding areas who suffered not only from these same problems but also from other, more serious and unfortunately fatal illnesses. I feel these problems are environment related and are caused by the air we breath and water we drink. Something must be done now before more lives are ruined. Surely you will agree with me that the greed of a few people is not worth the lives of so many.

Sincerely,

A handwritten signature in cursive script that reads "Melissa Mason". The signature is written in dark ink and is positioned below the word "Sincerely,".

Melissa Mason

Rt. 1, Box 38  
Grandview, Texas 76050



November 19, 1992

CEMENT KILN TASK FORCE

Twenty four years ago, we purchased land in the Midlothian area and built our home. The intention being that when I retired, we would have an Arabian Horse Farm. We purchased the best in foundation breeding stock and bred them for years without incident. Since the plants in Midlothian have gone to alternative fuels, we cannot get/nor keep a mare in foal. This I mention as it is only a minor example when compared to our real problem -- THE HEALTH PROBLEM TO ME, MY WIFE, MEMBERS OF OUR FAMILY, AND MANY PEOPLE WE KNOW IS THE REAL PROBLEM.

For several years, I have had glandular problems from my throat to the prostate area that numerous doctors cannot explain. My wife has developed auto-immune and respiratory difficulties which have caused her to be susceptible to many illnesses and has spent a great deal of time in the hospital for the past four years.

Many of our neighbors have cancer and/or hormonal problems and others have lost members of their family to cancer already. We have people in the area who have sent their children to private schools and have driven great distances in order that they might not have twenty-four hour exposure. We have other neighbors who have moved out of state (three homes in a row) due to health problems caused by these emissions. After they moved, their symptoms discontinued.

We live in a state with an abundance of natural gas. For the sake of all concerned, let's burn the safest fuel we know.

Respectfully,

  
Ralph Pope

476 Hidden Valley Trail  
Midlothian, Texas 76065  
214-299-5298

20 a  
3-17-93  
SB 338

"If We Can't Burn It, Then What Are We Going to Do With It?"

"If we can't landfill it we have to burn it." Nothing could be further from the truth. There are a wide variety of treatment technologies, in existence and in development, that destroy or detoxify hazardous wastes. Currently, a large quantity of wastes being sent to incinerators could be treated by other technologies. There are many wastes being burned that contain the same amount of toxic materials when they come out of a cement kiln or incinerator as when they go in...and then they're landfilled.

**Bioremediation.** The technology exists to use combined tactics of microbial breakdown to recover or neutralize 70% of current toxins. Bioremediation is a \$64 billion industry in Montana. Mycotech of Butte uses fungal technology to degrade petroleum hydrocarbons, creosote, coal tars, chlorinated solvents, pesticides and PCBs.

**Alternatives to incineration of wastes listed on the Holnam application.**

Holnam's recently revised Part A application lists wastes they propose to burn at the Trident cement plant. Holnam's press release on the application revision states they are "focusing on waste primarily generated in Montana" and proposing to burn "selected refinery wastes, spent potliner from aluminum production, and used filters and lint from dry cleaners".

**Ignitable wastes.** Although burnable by definition, incineration is an inappropriate treatment because these wastes are generally contaminated with metals. Metals are not destroyed by incineration, and in some cases incineration increases the toxicity of metals by changing their form.

Ignitables can and are being recycled at on-site stills. Off-site companies also recycle spent mineral spirits and return them to auto body shops, for example, as a product. Source reduction can reduce the waste generation significantly.

**Spent halogenated solvents.** Incineration of waste using halogens - fluorine, bromine, chlorine, iodine and astatine- is problematic. During and after incineration halogens form halocarbons, many of which are extremely toxic. Byproducts of burning chlorine - dioxins, furans, and polychlorinated biphenyls (PCBs) - are especially toxic.

A variety of techniques can be used to recover or purify spent solvents, on site or by an off-site commercial recycler. Source reduction opportunities abound.

**Refinery wastes, petroleum sludges.** Incineration is problematic due to the presence of metals.

Solvent extraction can be followed by other treatment technologies to recover oil. Treatment of sludges can enable recovery of metals or other constituents. Source and volume reduction measures such as dewatering can vastly reduce these wastes. Oil sludges do not have to go off-site to incinerators; they can be reused at the refinery. As an example, the Arco and Shell refineries in Washington reduced volumes of API separator sludge wastes by more than 90% and almost 75% through source reduction and dewatering.

**Aluminum production, potliner.** Spent potliners contain cyanides, fluorides and alumina.

Columbia Falls Aluminum is involved in a potliner recycling project. Ground spent potliner will be used to produce mineral wool, a material used for heat and sound insulation. A potliner lasts 3 to 5 years before it needs to be replaced.

Pot life can be extended, thereby reducing potliner waste, by changing pot design, directing electrical currents in the pot based on computer models to reduce the wear and tear on particular spots, and improving maintenance and operation of cells. Intalco Corporation has invested in lengthening pot life and their yearly potliner generation rate has dropped from approximately 6000 tons to 4000 tons per year as a result.

## Background

### How is aluminum made and what is spent aluminum potliner?

Aluminum is made through electrolytic reduction of alumina (aluminum oxide). This occurs in an electrolytic reduction cell referred to as a "pot." Alumina is dissolved in molten cryolite (aluminum sodium fluoride) at about 1760° in the pot. Electricity is passed through the cell. This electrical charge releases the oxygen from the aluminum in the alumina, leaving the aluminum in a molten state that can be tapped from the pot and cast.

The electrolytic reduction of alumina occurs between a carbon anode and cathode. The carbon anode is consumed in the process when the free oxygen attaches to the carbon and is discharged as carbon monoxide and carbon dioxide air emissions. The cathode is part of potliner.

The outside shell of the cell is steel (see illustration). The shell is lined with an insulating layer of insulating brick. The inner layer is the carbon cathode. The cathode may be constructed in two basic ways. Most common today is a pre-baked block that is manufactured off site and later installed. These blocks may be made of a variety of carbon sources such as petroleum coke, coal and graphite. Older technology uses sized anthracite coal bound with coal tar pitch and installed in place. This layer has steel bars running through it carrying electricity. A potliner lasts about 3 to 5 years before it fails and needs to be replaced.

The potlining is extremely hard at this point and must be removed with hydraulic hammers to be replaced.

### Why is potliner hazardous?

In order to retain the purity of the molten aluminum and structural integrity of the cell the molten aluminum and cryolite mixture is kept isolated from the steel shell of the pot by the potliner. Through the stress of the reduction process the potliner cracks and erodes and must be replaced.

Over the time in use, the carbon lining becomes impregnated with the molten cryolite solution. In addition, cyanide is created when the carbon combines with nitrogen. This occurs naturally in the process and cannot be avoided. The presence of these two materials, if in high enough quantities, causes potliner to be designated hazardous waste when disposed.

### How much potliner is there?

The seven primary aluminum smelters in Washington State generate 30 to 35 thousands tons of spent aluminum potliner per year. There are about 23 operating smelters in the United States. No other state has more than two smelters.

### How has potliner been managed?

Spent aluminum potliner has been handled in many different ways. It has been used as an additive in steel smelting, the manufacture of cement and in the manufacture of mineral wool. Recently, most potliner generated in Washington has been disposed of at the hazardous waste landfill in Arlington, Oregon. Potliner was stored in unregulated piles on site previous to implementation of the dangerous waste laws.

Two smelters are handling the material on site. One is storing it in permitted buildings, the other, disposing of it in a permitted landfill.

### How does this impact me?

The United States Environmental Protection Agency is proposing to ban the land disposal of spent aluminum potliner. This causes the need for development of alternative methods to handle the material. A process has been developed by Reynolds Aluminum to thermally treat the material. The thermal treatment facility is in Arkansas. Local, independent aluminum smelter operators have proposed using technologies that would use potliner within the state and result in products that are useful.

The Department of Ecology has encouraged waste generators to find ways to manage the wastes they generate "close to home" in order to minimize the chance of spills in cross country transport.

In addition, the department, in enforcing state law, encourages the use or reuse of materials through recycling, rather than treatment and disposal. The technologies proposed by the local operators are recycling technologies.

The department is encouraging demonstration of these technologies.

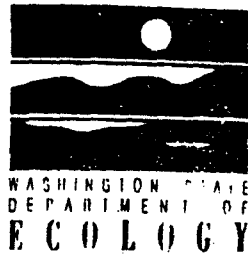
### Ecology and Vinalco Want Your Comments!

You are invited to review and comment on the Preliminary Determination through March 12, 1993. The public comment period presents an opportunity to have your ideas and comments heard by Ecology. Information repositories have been set up at the locations listed in the box on page one. To review more detailed documents than those in the information repository contact Ted Mix, (206) 586-0517 or Jay Shepard, (206) 753-3019.

A public hearing is also being held on March 2, 1993 at the Clark County PUD Building, 1200 Fort Vancouver Way, Vancouver, Washington. This will be an opportunity to learn more about the recycling technology, Preliminary Determination and Administrative Order.

Ecology will review all comments received and revise the Preliminary Determination and final Administrative Order, if necessary.

# Vanalco Potliner Recycling Project



The Department of Ecology has made a Preliminary Determination that Vanalco, Inc. can proceed under Administrative Order to demonstrate a recycling technology developed by Enviroscience, of Hot Springs, Arkansas. The technology will reclaim metals and produce valuable products using spent aluminum potliner and electric arc furnace dust. Both are dangerous wastes in the State of Washington. The project presents an opportunity to recover valuable materials from these two waste streams that were previously disposed of. The project is a joint venture of Vanalco, Vancouver, Washington, Kaiser Aluminum, Spokane and Tacoma, Washington and Columbia Falls Aluminum, Columbia Falls, Montana.

This fact sheet has been prepared to inform you about the proposed project and the order under which it will proceed.

## Public Comment Period

February 11, 1993 through March 12, 1993

## What is an Administrative Order?

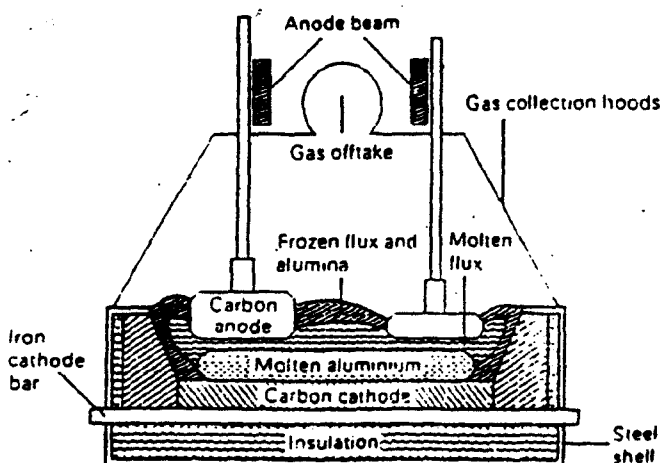
The proposed Administrative Order is a legal document that describes the parameters under which the proposed recycling demonstration project can take place. The order will ensure that the demonstration will operate in an environmentally sound manner to protect human health and the environment.

## Spent Aluminum Potliner Recycling

The proposed recycling project will blend ground spent aluminum potliner with electric arc furnace dust. Through heating valuable materials will be reclaimed.

Electric Arc Furnace Dust is particulate material that has been collecting in bag houses at secondary iron smelters. This material is rich in iron oxide as well as cadmium, chromium and lead. The process will reduce the iron oxide to iron, and produce marketable oxides of the other metals. Slag will be produced that will be spun into mineral wool. Mineral wool can be marketed as insulation or used to make ceiling tile. It is anticipated that all materials will be marketed, with no solid residues remaining to be disposed.

Typical Pre-baked Aluminum Reduction Cell



## February 1993

### PUBLIC COMMENT PERIOD

February 12 through March 12, 1993.

### SEND WRITTEN COMMENTS ON PRELIMINARY DETERMINATION TO:

Department of Ecology  
Industrial Section  
P. O. Box 47706  
Olympia, WA 98502-7706

### FOR FURTHER INFORMATION:

Ted Mix (206) 506-0517  
Department of Ecology  
Industrial Section

Jay Shepard (206) 753-3019  
Department of Ecology  
Southwest Regional Office  
WRRLC  
P. O. Box 4775  
Olympia, WA 98504-7775

### PUBLIC MEETING AND HEARING

7:00 PM Meeting  
8:00 PM Hearing  
Tuesday March 2, 1993  
Clark County PUD Building  
1200 Fort Vancouver Way  
Vancouver, Washington

### INFORMATION REPOSITORIES:

You may review the Preliminary Determination and related documents at:

Department of Ecology  
Industrial Section  
2404 Chandler Court S.W., Suite 260  
Olympia, Washington

Fort Vancouver Regional Library  
Main Branch  
1007 East Mill Plain Blvd  
Vancouver, Washington

printed on recycled paper

Continued on Page 2

# How Shell reduced waste

## The Martinez plant conducted a comprehensive upstream review to identify and quantify individual waste sources

**T. P. Hanson, M. F. Conner and W. W. Groda,**  
Shell Oil Co., Martinez, Calif.

EMPLOYEE ENTHUSIASM is the result of a program at Shell's Martinez manufacturing complex, designed to uncover waste sources and how to curtail them. Built-in widespread participation of plant personnel enhanced communication and created ongoing awareness of the need to fight pollution. Shell's waste minimization program provides tools to reevaluate all waste and identify opportunities for new waste-reduction projects.

**Steering team.** To begin the program, a steering team of management representatives from the environmental, engineering and business functions at Martinez and Shell's head office was formed. Its charter was to develop a long-term waste-reduction program that would:

1. Develop a system to conduct an upstream source review to identify both procedural changes and potential waste reduction projects and determine proper allocation of waste-management costs to the appropriate department.
2. Define engineering and capital resources required to carry out the program and obtain support from business functions
3. Provide a means to perpetually maintain the waste-minimization program by increasing employee awareness of the need, auditing for compliance and conducting future source-review assessments.

This program would include all solid wastes—both hazardous and nonhazardous. The hierarchy of waste minimization strategies would give source reduction and internal recycle top preference followed by beneficial reuse. Projects that reduce waste toxicity by treating to remove the hazardous waste characteristic would also be considered.

**Waste source review.** A working team consisted of two full-time process engineers with part-time assistance from the Martinez Environmental Conservation Dept. and Shell's Head Office. Main responsibilities were:

1. Conduct an upstream audit to quantify and identify all waste sources at the point of generation
2. Develop potential projects for reduction and/or detoxification of waste by changes in operation, procedures, maintenance and/or equipment
3. Prioritize and recommend a list of projects for further evaluation. These would include a short definition and preliminary analysis of resource requirements. Prioritization would be based on the amount of waste reduction achievable,

### A setting for change . . .

Shell Oil's 140,000-bpod refinery at Martinez, Calif., produces a wide range of products including fuels, lubricants and some chemicals. Wastes generated, typical of most refinery operations, include various spent catalysts, oily and biological wastewater treating sludges, construction debris, general trash, etc.

Shell's overall solid waste management strategy stresses reduction of waste generation and self-sufficiency at each manufacturing location to cut the amount of waste taken offsite for treatment and disposal. Capital projects that minimize waste by source reduction or beneficial reuse get a higher priority to make them more competitive for funding. As a result, a number of projects have been implemented at Martinez and other Shell locations to reduce and eliminate wastes.

hazardous nature of the waste and potential economic savings

4. Recommend an improved waste-management cost allocation system

5. Identify and evaluate the effectiveness of past projects undertaken to reduce waste generation.

**Review of solid waste data.** Since 1981, the Environmental Conservation Dept. at Martinez has maintained records on solid waste disposal by department. These departments usually were those that last handled the waste prior to disposal or treatment. In many cases they may not have been the original generator.

Fig. 1 summarizes the average allocation of solid waste treatment and disposal costs assigned to various departments. Logistics, which manages the effluent system and the tank farm area, bears the highest portion of the costs, because of sludge dewatering and off-site disposal. Other areas such as Utilities and an overall refinery administrative group (General) who provide services for the entire complex, also carry a high share of waste-management costs compared to the upstream processing units where most of the waste was generated.

Fig. 2 shows solid waste generation at Martinez (1985-87). Only about 16% could be readily identified with specific manufacturing processes. Over 50% of the solid waste generation is from wastewater treatment—both primary (oil/water separators) and secondary biological treatment plant sludges. The remainder is nonhazardous trash, contaminated dirt and other wastes, usually measured downstream of the generation source.

To identify waste-reduction opportunities and properly allocate costs, a better understanding of the upstream waste sources was needed. A waste-source review would provide this.

**Departmental meetings.** Beginning in November 1989, the working team conducted meetings with each of the eight operating departments, including Central Maintenance. Attending were representatives from operations, maintenance, business and engineering groups who supported that department (Fig. 3). Each unit review took one to two days depending on complexity of the operation.

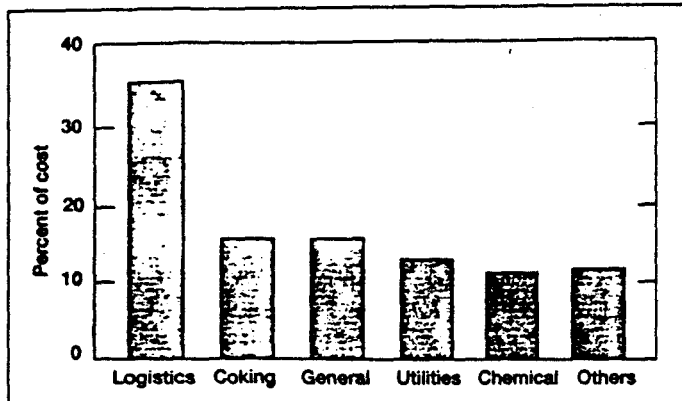


Fig. 1—Cost allocation before review.

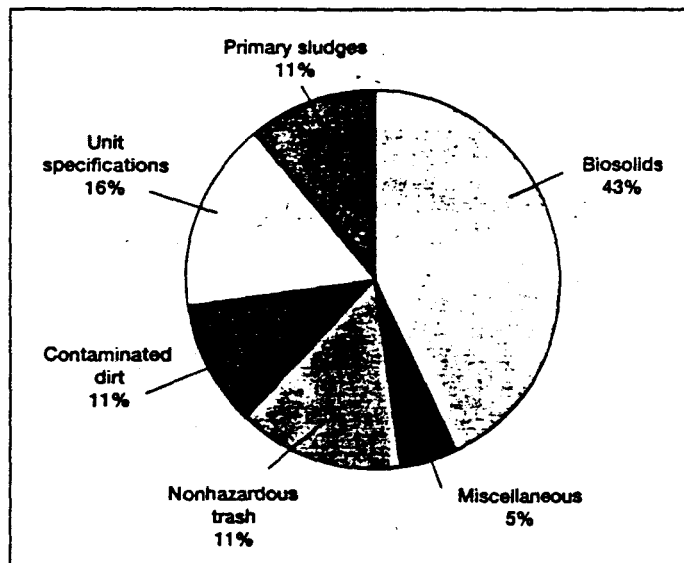


Fig. 2—General waste types.

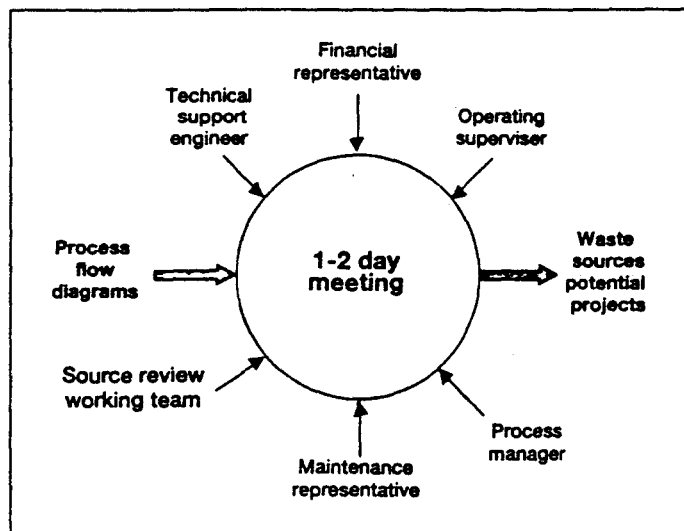


Fig. 3—Departmental waste-source review meeting.

In each meeting the purpose and need for a waste minimization review was explained by the working team. Simplified process flow drawings for each unit were used to track the process and identify waste sources. The technical support engineer and/or operations supervisor led the discussion of normal operations and waste generation. Maintenance personnel identified sources from turnarounds and routine maintenance activity. Inputs from the representatives were very

Waste quantities, both solid and liquid, were estimated on the basis of the group's knowledge of past operations. For waste waters going to the effluent treatment system, the upstream allocation of sludge production was based on volume as well as soluble organics, solids and oil content. In addition to source review meetings, the team used other data to check each group's estimate of quantities. When significant differences were evident, additional discussions were held with representatives of the department. Copies of compiled data were reviewed by each department before the study was completed.

It took the team about six weeks to conduct meetings and complete initial collation of information. Following data collection, the team reviewed each potential project in greater detail to determine waste reduction and to make a screening estimate of capital and other resource requirements. They also used the waste-source data to develop a proposal for reallocating waste management costs to upstream units. This phase of the investigation was completed in May 1990 and recommendations were made.

**Review summary.** In waste-source review sessions, all sources were discussed, including volumes from one drum per year up to large wastewater streams.

**Potential projects.** From this review the working team selected twelve projects (Table 1) for further evaluation based on the volume and/or toxicity reduction that could be achieved. It was estimated that these projects may reduce hazardous waste disposal by about 25% and would make a substantial reduction of all solid wastes. Eight of these projects would reduce waste generation by operational/procedural changes or internal recycle. Two projects would reduce waste through beneficial reuse options, and two would treat wastes to remove toxic constituents.

These projects are in a preliminary engineering stage for further evaluation to confirm their technical feasibility and define resource requirements. Additional projects identified by the working team that did not make this "short list" will be considered later.

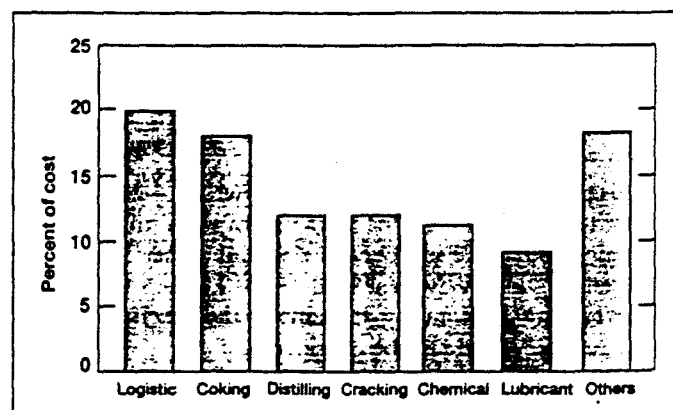


Fig. 4—Cost allocation after review.

**Cost allocation.** Based on the review of waste sources, a reallocation of costs for waste management was proposed (Fig. 4). This adjustment was based primarily on review of wastes (both solubles and solids) going to the waste-effluent treatment system. The proposed allocation significantly shifts the costs from Logistics, Utilities and General to upstream waste-source generators (such as Distilling and Cracking) that had previously been assigned a much smaller portion of the waste

Engineering Department in Houston, where he provides support to refineries and chemical plants in the area of waste minimization and management. In his 22 years with Shell, he has held a variety of technical assignments, mostly in the area of waste water treatment and refining technology. Mr. Hanson has a BS degree from the California Institute of Technology and MS and PhD degrees from Iowa State University in chemical engineering.

Miriam F. Conner works in the Environmental Conservation Department at Shell Oil's Martinez Manufacturing Complex. She received a BS degree in chemical engineering from the University of Virginia. Past assignments include energy and fuels management, effluent source control and support to alkylation. Currently she is involved with hazardous waste management.

Wallace W. Groda is manager of operations/technical support at Shell Oil's Head Office in Houston. Holder of a BS degree in chemistry from the University of Houston, he was recently manager of the process engineering department at Shell's Manufacturing Complex in Martinez, California. Mr. Groda has served in a number of operational and technical assignments in 22 years with Shell.

#### TABLE 1—Potential waste minimization projects for further evaluation

##### Source reduction/internal recycle

1. Further processing of oily sludges to produce materials that can be internally recycled in upstream refinery processes
- 2,3. Collect and cleanup used sandblasting grit for reuse. Two projects defined.
4. Reprocess spent hydrocarbon solvent from a chemical plant process in the crude distillation unit
5. Gunite slopes and exposed areas where dirt can be washed into the process sewer
6. Reroute wastewaters containing coke fines from the process sewer to existing facilities, which recovers coke fines from water as a salable product
7. Improve operation of clarifier to prevent carry over of coke fines to the process sewer
8. Improve separation of sulfonates discharging waste waters to the sewer

##### Beneficial reuse

9. Install facilities to remove disulfides from certain spent caustics so they can be sold to reclaimer
10. Improve trash segregation to facilitate reuse opportunities for certain waste materials

##### Toxicity reduction

11. Install neutralization equipment to treat corrosive filter cake media
12. Initiate procedures for testing of all insulation for asbestos to minimize mixing of nonasbestos with asbestos insulation during turn-around activities

This cost allocation should provide additional awareness and economic incentives for these upstream process units to justify waste-reduction projects. As projects are implemented, the allocation will be adjusted to give credit to the department implementing the project.

**Past projects.** Some 36 projects were identified, initiated and completed since 1984. These projects have reduced waste generation at Martinez by about 11,000 tons/yr.

**The next phase** of the waste-assessment program, in progress, is further evaluation and design work by the engineering group on identified projects. Next: management approval and funding. There will be continued dialogue with operating departments to improve on waste-source information.

As part of an ongoing awareness effort, employees are encouraged to suggest new ideas how waste can be reduced. Each department promotes and incorporates waste reduction practices in its operations.

## PREVENT FIRES AND DOWNTIME!



**KEY BELLEVILLES "AFB" FLANGE BOLTING SPRINGS ARE PROVEN TO PREVENT FLANGE LEAKAGE! ALSO AVAILABLE IN STAINLESS STEEL. CONCERNED ABOUT SAFETY? SO ARE WE!**

**CALL  
800-245-3600**

For More Information  
and Free Catalog.

## KEY BELLEVILLES, INC.

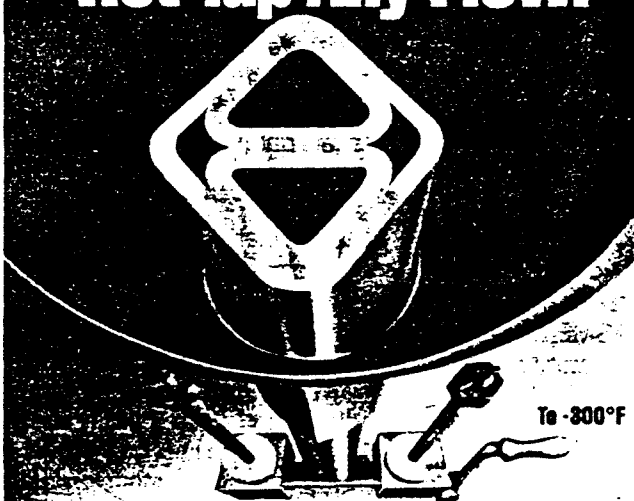
100 KEY LANE • LEECHBURG, PA 15658

TELEPHONE: 412/295-5111  
TOLL FREE FROM ANYWHERE IN THE US AND CANADA:  
800/245-3600  
FAX: 412/295-2570 TELEX: 812427



Circle 115

## Hot Tap Any Flow.



To -300°F

With the Flo-Tap      the original averaging Annubar® you can measure any flow from hot to cold, gas to steam with standard specs or custom design in any size from ½" to 30". The Dieterich Standard Annubar®,

pitot, allows ease of installation with no downtime. And the range of sizes we've covered world-wide assures you one source and one number to call. 303/530-9600.



**Dieterich Standard**

A Industries Company  
Post Office Box 9000 Boulder, Colorado 80301

**Dieterich Standard ANNUBAR® Flow Systems**

Circle 116



Exhibit 21 contains 4 photographs - of the Ash Grove Cement kiln and the Montana City School. The originals are located at the Historical Society at 225 North Roberts Street, Helena, MT 59620-1201. The phone number is 444-2694.



EXHIBIT 22  
DATE 3-17-93  
HB SB 338

HOUSE OF REPRESENTATIVES

NATURAL RESOURCES COMMITTEE

WITNESS STATEMENT

PLEASE PRINT

NAME WILL SWEARINGEN BILL NO. 338  
ADDRESS 1121 S. 3RD AVE DATE MAR. 17, 1993  
WHOM DO YOU REPRESENT? MYSELF AND MY FAMILY  
SUPPORT ☒ OPPOSE ☐ AMEND ☐

COMMENTS: \_\_\_\_\_

I SUPPORT THE HAZARDOUS-WASTE SITING ACT FOR 2 MAIN REASONS:

(1) ECONOMIC

HAZ. WASTE BURNING WILL PREVENT MONTANA FROM  
ATTRACTING CLEAN NEW INDUSTRY AND COULD  
DAMAGE OUR #1 INDUSTRY, AGRICULTURE.  
A RESPONSIBLE SITING ACT WILL PREVENT  
NEGATIVE IMPACTS.

(2) PUBLIC HEALTH

IF HAZ. WASTE BURNING IS SO SAFE, WHY  
DOES HAZ. WASTE HAVE TO BE SHIPPED HUNDREDS  
(IF NOT THOUSANDS) OF MILES TO MONTANA FOR  
DISPOSAL? WHY HAVE MOST COMMUNITIES  
REFUSED TO ALLOW IT? WHY HAVE MOST OF  
OUR NEIGHBORING STATES ALREADY PASSED  
SITING REGULATIONS?

**RICHARD E. BACH**

Box 149 MCR  
Saddle Mountain Drive  
Clancy, MT 59634  
March 17, 1993

EXHIBIT 23  
DATE 3-17-93  
HB SB 338

House Committee on Natural Resources  
Capitol Station  
Helena, MT 59620

Re: Support for SB 338

Mr. Chairman, and Members of the Committee:

As a second generation Montanan residing in Northern Jefferson County within two miles of the Ash Grove cement plant, I have a personal interest in the passage of SB 338. Presently, my two young children attend a daycare center across the road from the Montana City School, within a half a mile of the cement plant; in a year and a half my oldest will begin kindergarten at the school.


There has been a large amount of literature released recently demonstrating the dangers of hazardous waste incineration by cement kilns. All of it has been responded to, and discounted by, the cement industry as indicative of very little. However, above all the rhetoric on both sides of the issue, one thing should be evident by the latest EPA studies: they know that dangerous particulates are released in kilns burning hazardous wastes; they just don't know *how* dangerous the emissions are.

I do not believe any legislator, any plant employee, or any plant spokesman would knowingly subject his or her children to such emissions. Nor would I. As a parent, I cannot allow my children to be used as guinea pigs to test the safety of the emissions of this plant, all in the name of industry profit and jobs saved. In truth, given the vast amount of literature on the subject that demonstrates the hazards of such emissions, I cannot comprehend the fact that a debate is even occurring on this bill.

If this bill is not passed, we have conceded that money and jobs have a bigger agenda in our future than the health and safety of our children. If this bill is not passed, then the industry will have created a buffer zone of its own between residences and cement plants burning hazardous wastes, for *no* parent will want to raise his child in such an area.

There is a time when the dignity and the welfare of the individual Montanan must be placed above the demands of industry. I ask you to pass this most responsible piece of legislation, to preserve the integrity of the natural resources of this state, the value of personal property, and the health and safety of the people and their children.

Sincerely,

  
Richard E. Bach

Hauer - Jupp

Pm 431

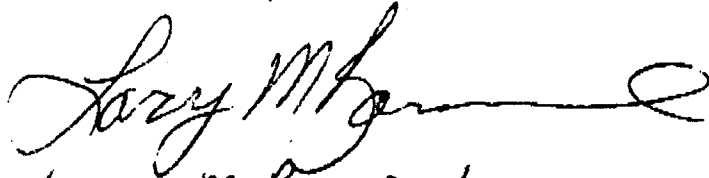
EXHIBIT 24

DATE 3-17-93

HB 50 338

## Members of Natural Resources Committee

I am a voting citizen of Montana, I'm a native to the state and I wish to encourage you to support SB 338 as well as SB 339. I am an informed citizen and have contact with many people in my work, and I very seldom have an opportunity to hear a fellow citizen that favors allowing the cement kilns to burn HAZ waste in their existing locations. We Montanans see through this smoke screen and know that there is no need to allow them to burn, they stand only to make big bucks and "jobs" are not the issue at hand. Please, remember why we choose to stay in Montana, and let's preserve those reasons. Thank you!



Larry M Barnard

421 So 10th

Bozeman MT 59715

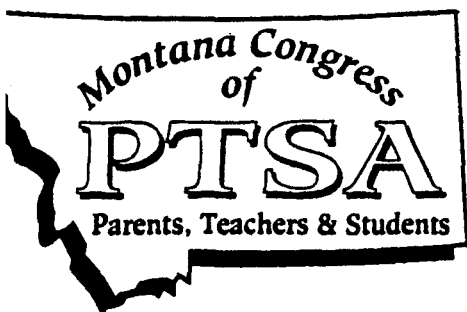


EXHIBIT 25  
DATE 3-17-93  
HB SB 338

Testimony S.B. 338  
House Natural Resources Committee  
March 17, 1993

Chairman Knox and Members of the House Natural Resources Committee;

I am Ellen Bourgeau, President of the Montana Congress of Parents, Teachers and Students. We are commonly known as the Montana PTSA and with 10,250 members are the largest child advocacy organization within the state. The National PTA, our parent organization, is the largest child advocacy organization in the nation with 7 million members. The welfare and safety of children and youth is at the heart of all we do and advocate. One of our objects is to secure adequate laws for the care and protection of children and youth in our state and nation.

I am here on behalf of the 10,250 members I represent to address S.B. 338 and to ask you to support this act to define and establish siting criteria for commercial dangerous waste incineration facilities.

"DON'T Shortchange Montana's Future" is the Montana PTSA's theme for legislative action during the 1993 legislative session. Our children are our future. In 1989 we reaffirmed a resolution which required PTA units to alert members to the possible hazards affecting the health, safety, and well-being of communities posed by the production, transportation, storage, and disposal of hazardous wastes.

Until it can be proven without a doubt that the process of incinerating hazardous waste is not harmful to the environment or children, Montana's lawmakers must protect those in our society who are unable to protect themselves--our children. This bill would provide some safeguards. Some therefore being better than none. Other countries and states are just beginning to compile hazardous waste incineration statistics. As the studies are finalized let's hope that we erred on the side of Montana's children and youth and not on the side of industry.

Please support passage of S.B. 338. Thank you for your time and attention.

Ellen Bourgeau  
1111 Eaton  
Missoula, MT 59801

Testimony in Support of SB 338  
for House Committee on Natural Resources

EXHIBIT 26  
DATE 3-17-93  
HB SB 338

For the following reasons SB 338 should be sent on to the full House for consideration with your full approval:

- 1) **This Siting Act is balanced.** It allows enough leeway for incinerator siting in at least 11 counties yet provides for a common sense margin of safety. Buffer zones would acknowledge that **accidents do happen.**
- 2) A buffer zone is important because in spite of industry claims to the contrary **incinerator technology has not been proven safe.** EPA is currently reassessing its basic assumptions for risk assessments, cement kiln dust safety, and the basis for conducting test burns.
- 3) **There is no hazardous waste crisis in Montana.** The amount of waste that is being currently shipped out of state is less than 1/10 of what the two cement kilns are applying to burn. The new **head of EPA even stated** recently that **over-building incinerators will create incentives for more generation of wastes;** not reduction which is the best solution to the waste problem.
- 4) **DHES rules are not the most strict in the nation** and thus do not provide all the necessary protection. They do not include siting as does Utah and a number of other states. A close examination of DHES rules will reveal that **they are based essentially on self-monitoring by the burning facility.** In addition the federal BIF rules on which the MT rules are based are currently under litigation as being against the legislative intent of RCRA.

I strongly urge you to do what is best for all of Montana and vote yes for SB 338.

Hobart Collins  
858 Cobb Hill Rd.  
Bozeman

EXHIBIT

27

DATE

3-17-93

HB

SB 338

## *Sonny Todd Real Estate*

*301 West First, P.O. Box 788, Big Timber, Montana 59011*

*Telephone: (406) 932-Mont*

February 16, 1992

Rep. Dick Knox  
House Natural Resource Committee  
Montana House of Representatives  
Capitol Station  
Helena, MT 59620

RE: Senate Bill 338

Dear Sir,

As I find myself out of state this week, I would ask that you place the following into testimony as support for passage of Senate Bill 338, during the appropriate hearing.

My name is Mark Norem, I am both a licensed real estate broker and livestock broker. Though presently living in Big Timber, I grew up in the Gallatin Valley, enjoying the many recreational opportunities and the wonderful lifestyle the area offers while going to school, working in the family business and purchasing my first home.

As most all of my family is currently living in the Gallatin Valley, my concern for the areas integrity and living environment are naturally number one.

Another concern I have is for a clients property value on lands adjacent to ideal property at the Trident Site. With a critical spring creek fishery plus agricultural production providing late fall, winter and spring forage needs for 600+ head of livestock, I can guarantee current value of 1.35 million will be at the very least cut in half should this bill not be passed.

At present I have 2 separate but committed buyers for this ranch. One with interests in the fisheries and other wildlife sporting opportunities. The second is interested in the same but also in need of a winter base for livestock. Neither wishes to expose themselves, nor their pocketbook to the potential unknowns associated with owning property next door to a hazardous waste incinerator.

As many of you serving on the Natural Resource Board also own property, which you may wish to sell someday, please think how you might feel as potential buyers turn around and drive out the

CLIMBING ARROW RANCH, INC.  
PAGE ANDERSON, PRESIDENT

EXHIBIT 28  
DATE 3-17-93  
# SB 338

PHONE: (406) 285-3471  
FAX: (406) 285-3471

11511 MADISON ROAD  
THREE FORKS, MONTANA 59752

March 16, 1993

NORM WALLIN  
WILBUR SPRING  
CAPITOL STATION  
HELENA, MONTANA 59620

Dear Mr. Wallin and Mr. Spring:

I am submitting this letter to you as President of Climbing Arrow Ranch Inc. (CA Ranch) and on behalf of the Anderson family. CA Ranch is one of the larger commercial cattle ranches in the State. Its land is located in Gallatin, Broadwater, Madison, and Meagher counties.

We strongly urge you to vote for passage of SENATE BILL # 338, the "Hazardous Waste Burning Siting Act." We fully concur with the statement submitted by Keith Nye on behalf of Darigold Farms that SENATE BILL # 338

"provides only minimal safeguarding of our agricultural food producers but this minimal distance requirement of siting is a crucial barrier to somewhat protect our food supply."

See the February 9, 1993 letter submitted by Darigold Farm to the Montana senate Natural Resource Committee. We will not reiterate the statements made in Mr. Nye's letter but simply ask you to review his letter.

As a commercial cattle producer, we are particularly concerned with the potential adverse effects of hazardous waste burning on livestock. We submit that there are serious questions about the health risks associated with hazardous waste incineration that mandate that Montana enact at least the minimal siting requirements contained in SENATE BILL # 338.

The indirect risks resulting from the ingestion of hazardous waste emissions by cattle have not yet been adequately evaluated. According to a recent January 22, 1993 internal memorandum of the EPA those indirect risks can be significant. This memorandum stated:

Spring/Wallin letter p.1

"A preliminary assessment . . . does show that risks from beef and milk consumption can be 1,000 times higher than risks from inhaling [ such emissions]"

This memorandum was written by Richard Guimond, assistant administrator with the EPA's office of Solid Waste and Emergency Response. According to the Bozeman Chronicle, a former EPA scientist from Helena stated that the assessment applies to cement kiln burning, because the EPA has also failed to analyze indirect risks at those sites.

A number of other American and foreign studies confirm that there is at the very least a serious potential of risk associated with the burning of hazardous wastes. Wind and rain can cause particulates to travel considerable distances from their points of emission and highly toxic dioxins and other compounds resulting from burning hazardous waste can accumulate in significant levels in beef and dairy cattle. These toxins build up in the fatty tissue of cattle and will contaminate their meat and milk.

Even the EPA will now be considering buffer zones for hazardous waste incinerators similar to those contemplated in the bill before the Montana legislature.

I have spoken with many other farmers and ranchers and have found a unanimous negative opinion of hazardous waste burning in general. Most are concerned with air quality problems, stack emissions and their effects, and reduced property and recreational values in the areas surrounding any hazardous waste disposal operation. They all agreed that the " Hazardous Waste Burning Siting Act" should be passed in order to provide a minimum of protection against impacts from burning and hauling these hazardous wastes in Montana.

Again, we urge you to support SENATE BILL # 338.

Sincerely,

*Climbing Arrow Ranch, Inc.  
by Page B. Anderson*

Climbing Arrow Ranch, Inc., by Page B. Anderson,  
President



front gate after being informed the guy next door is burning something we all know little about.

I question how any reasonable person could not vote for SB338 providing immediate protection for our children, one of the nations foremost rivers, Montana's #1 industry- agriculture, and the values related to each.

Please support SB338 until research and the knowledge gained by it allows us to make a more educated decision.

Sincerely,

*Mark Norem*  
*by MTD*

Mark Norem  
Broker Associate  
Sonny Todd Real Estate

EXHIBIT 29  
DATE 3-17-93  
HB SB 338

March 15, 1993

Senator Knox & Committee Men:

We are writing to ask you to support senate bill #338 (siting bill).

We think more time and study is needed to fully understand all the repercussions that may come about from burning hazardous waste. The effects to human health in surrounding areas, as well as the environment should be considered. Once this goes into production, it will be hard to reverse any bad effects it may have, if there is any. True there may not be any, but if there is, then we are in a bad way that may be impossible to reverse. I do not think it is worth the risk.

As ranchers, we are also worried about animal health, as well as property valuation that may be effected by burning hazardous waste in the surrounding area.

We feel that a slow and thoughtful process must be gone through before letting hazardous waste material be burned in the state of Montana.

Sincerely,

*Wayne Buckingham*  
*Tary Buckingham*

Wayne & Tary Buckingham  
White Sulphur Springs, MT 59645

Ben Hurwitz  
1476 Smith River Road  
White Sulphur Springs, MT 59645  
(406) 547-3500

EXHIBIT 30  
DATE 3-17-93  
HB SB 338

HOUSE NATURAL RESOURCES  
CHAIRMAN DICK KNOX

DEAR MR. KNOX

WE ARE RANCHERS IN MEAGHER  
COUNTY - I CANNOT TESTIFY IN PERSON  
BECAUSE WE ARE CALVING I AM FOR  
PASSAGE OF HOUSE BILL 338

THANK YOU  
BEN HURWITZ



EXHIBIT 31  
DATE 3-17-93  
HB SB 338

March 16, 1993

Senator Knox & Committeemen:

I am writing this letter to ask you to support Senate Bill 338.

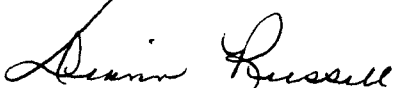
I believe it would be a mistake to allow burning of hazardous or medical waste in the state of Montana because of the environmental dangers and health hazards involved.

Also, I believe it would have a definite negative effect on the property values in our state.

Until there has been more studies made as to the effect of such burning, please support this bill.

Thank you for your time.

Sincerely,

A handwritten signature in cursive script that reads "Diann Russell".

Diann Russell

Mar 3, 1993

House of Representatives Natural Resource Comm.

Chairman Knox and Committee Members

EXHIBIT 32

DATE 3-17-93

HB SB 338

I am supporting L.B. 338. As third generation ranchers in Meagher County, we are very concerned about the air and water and crop contamination possible through the placement of toxic waste incinerators in our country and throughout the state.

My husband and I both suffer from chronic asthma and feel that Montana is one of the best places we can live for any kind of quality life.

Thank you for your consideration.

Mr. & Mrs. Wallaw Buckingham  
1700 Smith River Rd.

White Sulph. Spgs. Mt 59645  
Phone # 547-3440

1712 Highway 360  
White Sulphur Springs, Mt. 59645  
March 10, 1993

EXHIBIT 33  
DATE 3-17-93  
~~HB SB 338~~

To the House Committee considering SB 333:

As ranchers and citizens of the state of Montana, my family and I are concerned with preserving the unique pristine quality of our state. Many other states have had their air and water ruined in the interest of short-term economic gain. I believe that the consideration of any undertaking that may possibly diminish quality of life here in Montana should be thoroughly scrutinized before it is allowed to proceed.

Some industries in Montana are considering the burning of hazardous or medical waste as an economic boon to their businesses, providing them with fuel which costs them nothing and which they are, in fact, paid to burn. I can understand the need for any business to try to make itself more cost effective. However, when the need of any business to improve its profits is weighed against the greater good of the population, affecting health of our people as well as the health of other businesses dependent upon clean air and water, I think there should be no question as to the choice made.

There is not yet enough good information on the effectiveness of waste incinerators. The people who are pushing to bring large-scale waste burning into Montana would like to have us believe they are completely safe. I doubt the ability of any technology to burn wastes so completely that the extremely toxic gases emitted would be eliminated. There must be an answer to disposing of hazardous and medical waste, but I don't believe the answer lies in importing more of the stuff from other states. I don't believe the answer lies in burning. Senate Bill 333, to me, is a minimal regulation, which will at least restrict the building of incinerators to sites less likely to impact surrounding populations and water.

I urge you to support Senate Bill 333. Thank you.

Sincerely,

*Mrs. Julie Witt*

Mr. and Mrs. Eugene Halmes  
2175 Lingshire Rd.  
White Sulphur Springs, MT 59645

March 17, 1993

House Natural Resources Committee  
House of Representatives  
Helena, MT 59620

EXHIBIT 34

DATE 3-17-93

HB SB 338

Dear Chairman Knox and Natural Resources Committee members:

For the record: We are Phyllis M. and Eugene M. Halmes -- Life time Montana ranchers. (actually third generation Montana ranchers) Since 1977 we have lived in Meagher County - prior to moving here we lived on our ranch in Cascade County, in the Belt-Highwood area.

We are asking you to support S.B. 338, The Dangerous Waste Siting Act, without weakening it with amendments. Our clean water, air and even our crops are at risk by the incineration of hazardous wastes. Montana should not be targeted for this industry! There is no scientific evidence that it can be done safely. More and more evidence is coming to light that it is not safe. Heavy metals are not destroyed at any temperature and are redistributed into the air -- there is the risk of direct exposure and of inhalation. Also there is the risk that cattle will eat grass laced with carcinogenic dioxins and pass them on to humans.

Our fish and game in Montana can still be eaten without concern -- as well as our crops, livestock and milk. As Meagher Co. cattle ranchers, we feel that this is a fact that all Montanans should want to preserve.

Please pass S.B. 338 -- help keep our state clean for future generations; our grandchildren and yours.

Thank you for your positive consideration and support.

Phyllis Halmes  
Eugene Halmes

March 16, 1993

House of Rep. Resource Committee  
Chairman Knox and Committee Members

EXHIBIT 35  
DATE 3-17-93  
HB SB 338

I am a wife and a mother of two small children living on the family ranch with my parents.

I am deeply concerned about any toxic waste incinerator being placed in Montana. My first concern being the quality of air, I suffer from asthma as does my mother. A mere cigarette sends us into attacks. And what about our rivers and streams?

Montana is known and loved for its clear blue skies and sparkling streams and that is the source of most of its tourism. We don't want to ruin this rare commodity as so many other states have. Please don't sell our state down the toxic waste river.

Sincerely,  
Jerry L. Mittelstadt  
1700 Smith River Road  
White Sulphur Springs  
Montana 59145



Ray and Barbara Russell  
P.O. Box 752  
White Sulphur Springs, MT 59645  
(406) 547-3548

March 15, 1993

EXHIBIT

DATE 3-17-93

HB SB 338

To Whom It May Concern:

Please Support SB 338. I am a rancher's wife, and I think there needs to be much more study done before waste incinerators are in use. Recent studies are proving that there is more harm in the gasses from the incinerators than people want to admit.

Thank You  
Barbara Russell

Ray and Barbara Russell  
P.O. Box 752  
White Sulphur Springs, MT 59645  
(406) 547-3548

March 15, 1993

EXHIBIT 37  
DATE 3-11-93  
~~HB~~ SB 338

To Whom It May Concern:

Please support SB 338. I am a rancher  
and believe that property values will  
decline if these incinerators are allowed  
in the state of Montana.

Thank you.

Ray Russell

Testimony of Richard Berg in support of SB 338

EXHIBIT 38  
DATE 3-17-93  
HB SB 338

Mr. Chairman, members of the committee,

My name is Richard Berg, and I am submitting written testimony. I would have preferred to appear in person, but my overriding commitment is to cows and newborn calves at this time of year. I am a fourth generation rancher whose family has lived near the headwaters of the Musselshell river for over 100 years.

Montana has long been a state predominately dependent on agriculture, and agriculture has served it well. Of late Montana has become a hip haven for tourists and the retreating rich. Though occasionally annoying to natives, all things considered, tourism has also been a low impact, economically beneficial industry. But now it seems Montana is facing new industrial choices, namely that of the huge burgeoning waste management industry. Seattle - Portland - Denver - Minneapolis - Chicago are all seeking simple, out of sight solutions to their waste problems. And here Montana sits in the middle. From the outside Montana is often viewed as politically impotent, socially naive, and economically desperate. In other words, we are ripe for invasion and the invasion has begun. It is very well funded and politically slick. Are we ready?

As a cattleman, I wonder if contaminated streams or aquifers or even grasses and soils might in turn contaminate my cash crop which is feeder cattle. (Remember when heavy metals, PCB's, and dioxins go up, they must come down on that which my cattle eat.) It has been shown that dioxins and heavy metals accumulate in beef, chicken, pork, dairy, and eggs in elevated concentrations. (USEPA 1988) Poor reproduction in livestock has been associated with heavy metal contamination of soil and plants. (J. Webber 1980) The potential for loss of productivity and reduced marketability of products makes locating hazardous waste incineration in the vicinity of agricultural areas a very risky business. Are we ready?

As a father, I wonder what effect an incinerator might have on my children at a nearby school. Are we ready?

You, as legislators, have been chosen by the people of this great state to represent them. Your awesome responsibility is to see that we approach this opportunity or debacle with farsighted wisdom and acumen - and with great caution. Are we ready?

Well, we have no state siting regulation for these types of incineration facilities. It is absolutely wide open. If we are to allow commercial waste incineration, and perhaps constitutionally we must, then let us proceed with fair but cautious, stringent guidelines to ensure the safety of our citizens and quality of our resources. SB 338 begins that process fairly and cautiously. It will provide a needed framework within which responsible companies can become permitted and, we all hope, operate safely.

For my cows, for my children, for your children, for the economic and environmental viability of Montana's future, I ask you to support SB 338. Thank you for your time and consideration.

Richard Berg  
Lennep Route  
Martinsdale, MT 59053

*Rep. Schindler*  
*(Rancher Testimony)*

EXHIBIT 39

DATE 3-17-93

HB SB 338

March 17, 1993

Montana House of Representatives  
Natural Resources Committee

Dear Committee Members:

We are writing as concerned citizens, to support Senate Bill 338, the siting act for incineration of dangerous wastes. We are now in a situation where companies have applied for permits to burn dangerous wastes in cement kilns in this state. Our concern is that the such incineration is not subject to the EPA regulations set out for other incinerators and that, consequently, our environment will not be protected from the hazardous emissions resulting from the kiln incineration practices. It has been found by the EPA that cement kilns fueled by hazardous waste produce kiln dust containing materials hazardous to the health. Common sense dictates that we should not allow such incineration near residences, schools, waterways, and other sensitive areas.

As our representatives in the House, you are given the opportunity and power to decide what measures are appropriate to protect this State's resources. Please carefully consider that Senate Bill 338 is an appropriate measure to restrict, yet allow, incineration. Siting acts which protect surface and ground water, homes, schools, and other gathering places, and other resources listed in Senate Bill 338 are in place in Washington, Oregon, Utah, Wyoming, Texas, Colorado, and Idaho. Senate Bill 338 is a workable solution to the interests involved in this issue.

Thank you for your attention to this. Please do not back away from the opportunity to handle this issue.

Sincerely,

Barb & Don Harris  
1501 1/2 Boulder Ave.  
Helena MT 59601



**Special  
Resource  
Management** INC.

EXHIBIT 40

DATE 3-17-93

SB 338

P.O. Box 4188 • Butte, MT 59702  
(406) 782-4201 • (800) 735-8964 • (406) 782-9968 FAX

*A Montana Power/Entech Company • AA/EOE M/F*

**Testimony before the House Natural Resources Committee on SB 338, March 17, 1993**

SRM is a full service hazardous waste management and environmental services company that has been serving the regulated community in Montana and surrounding states for seven years. In the course of our business, we have successfully applied siting criteria to different types of waste management facilities to evaluate alternatives and quantify potential effects on people and the surrounding environment.

On Monday, the Montana DHES discussed in detail with you their permitting process for hazardous waste facilities, in particular BIF proposals. Having recently participated in the permitting process for our Part B permit, we know the department's rules and procedures to be thorough, rigorous and complete. Public involvement is substantial in the permitting process and becomes even more extensive when an EIS is performed. The permitting rules and activities conducted during an EIS consider siting issues and the potential effects of a specific facility on the surrounding area, including the potential effects on public health. As such, many siting criteria are considered and some of these are in fact exclusionary; they prohibit specific activities in certain locations. These criteria already exist in the current regulations. Other criteria, which may be more subjective but are no less valuable or important, are also provided for in the existing permitting process.

Beyond the criteria already present in the rules, this bill arbitrarily establishes criteria that simply exclude potential hazardous waste facilities from any consideration rather than subjecting these proposals to the rigors of the permitting process you have heard described. This bill eliminates from consideration existing facilities that can likely provide safe disposition of selected hazardous wastes generated in Montana rather than evaluating the advantages and disadvantages of a proposal and reaching a rational, technically sound decision. Although not all hazardous wastes are best disposed of by incineration, many waste streams--such as painting wastes, petroleum sludges, non-chlorinated solvents/degreasers and contaminated fuels--are best disposed of by incineration or energy recovery. However, no permitted facilities are located in Montana and, in fact, the closest are located several hundreds of miles from Montana.

We have also heard speculation that the reason for our opposition to this bill stems from alleged plans to utilize power plants in Billings and Colstrip, operated by the MPC Utility Division, for incineration of hazardous waste. Neither MPC nor SRM has any such plans and neither intends to develop plans that incorporate these plants into any such incineration or energy recovery system.

The answers to legitimate concerns regarding the safety of a proposed facility will be obtained by subjecting the proposal to the permitting process with meaningful public involvement, not by excluding options that may allow hazardous waste generators to comply with their regulatory obligations more cost effectively. We believe in the value of siting criteria that are technically justified and that build a framework to resolve competing demands. However, SB 338 does not establish such a framework and does not provide benefits to public health or our environment beyond those benefits afforded in the established permitting process for hazardous waste facilities.

David K. Nation, P.E.  
Vice President and General Manager

Rep. Knox

Box 172, Star Route  
Clancy, Montana 58634  
March 9, 1993

EXHIBIT 41  
DATE 3-17-93  
HB SB 338

Representative Dick Knox, Chair  
Natural Resources Committee  
House of Representatives  
Capital Station  
Helena, Montana 59620

Dear Representative Knox and members of the Committee,

We are writing to request your support of Senate Bill 338. As residents of the Montana City area for fourteen years, we are concerned about the burning of hazardous waste at the Ash Grove cement plant located in our community. Likewise, we are concerned about the economic health of the Ash Grove plant and its ability to provide jobs to persons in the area. We have tried to remain objective toward SB 338 by looking at both sides of the issue and making a rational decision after analyzing all of the information available.

However, it is clear the decision to burn toxic waste in plants such as Ash Grove is motivated by greed and profit margins. The EPA has concluded that not only are the emissions laden with hazardous materials, but the finished cement and left-over dust contain dioxins, furans and even plutonium. The agency also found significant quantities of lead, cadmium and arsenic contamination in cement dust. Cement water pipes could easily contaminate water supplies. Another regulatory loophole allows cement companies to dispose of waste cement dust as if it were household garbage. In 1990, 114,000 tons of cement dust were sold to farmers to plow into acidic soil. This dust, which contains heavy metals, dioxins and furans is being used to produce the nation's food supply.

The more we read, the madder we get! The cement industry was intimately involved with the writing of the rules under which they must deal with hazardous waste. Even with this self-protection scheme, they are still operating "on the edge". The large foreign companies doing the majority of the hazardous waste burning in this country are the leaders of the international cement cartel that has rigged cement prices in Europe and Canada. It all comes back to the cement companies wanting to maximize profits with little concern for people or the environment.

We agree with the idea of responsibly disposing of hazardous waste. However, it should be perfected in controlled, laboratory conditions before it is thrust upon the public.

Thanks for reading this letter. Again, we urge your support of SB 338 for the ultimate good of Montana.

Sincerely,  
Doug and Connie Denler

*Doug Denler*  
*Connie Denler*

cc Representative Duane Grimes  
Senator Jack "Doc" Rea

**RICHARD E. BACH**

Box 149 MCR  
Saddle Mountain Drive  
Clancy, MT 59634  
March 17, 1993

EXHIBIT 42  
DATE 3-17-93  
HB SB 338

House Committee on Natural Resources  
Capitol Station  
Helena, MT 59620

Re: Support for SB 338

Mr. Chairman, and Members of the Committee:

As a second generation Montanan residing in Northern Jefferson County within two miles of the Ash Grove cement plant, I have a personal interest in the passage of SB 338. Presently, my two young children attend a daycare center across the road from the Montana City School, within a half a mile of the cement plant; in a year and a half my oldest will begin kindergarten at the school.

There has been a large amount of literature released recently demonstrating the dangers of hazardous waste incineration by cement kilns. All of it has been responded to, and discounted by, the cement industry as indicative of very little. However, above all the rhetoric on both sides of the issue, one thing should be evident by the latest EPA studies: they know that dangerous particulates are released in kilns burning hazardous wastes; they just don't know *how* dangerous the emissions are.

I do not believe any legislator, any plant employee, or any plant spokesman would knowingly subject his or her children to such emissions. Nor would I. As a parent, I cannot allow my children to be used as guinea pigs to test the safety of the emissions of this plant, all in the name of industry profit and jobs saved. In truth, given the vast amount of literature on the subject that demonstrates the hazards of such emissions, I cannot comprehend the fact that a debate is even occurring on this bill.

If this bill is not passed, we have conceded that money and jobs have a bigger agenda in our future than the health and safety of our children. If this bill is not passed, then the industry will have created a buffer zone of its own between residences and cement plants burning hazardous wastes, for *no* parent will want to raise his child in such an area.

There is a time when the dignity and the welfare of the individual Montanan must be placed above the demands of industry. I ask you to pass this most responsible piece of legislation, to preserve the integrity of the natural resources of this state, the value of personal property, and the health and safety of the people and their children.

Sincerely,



Richard E. Bach

EXHIBIT 43  
DATE 3-17-93  
HB SB 338

March 18, 1993

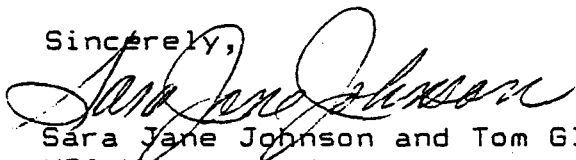
Chair Dick Knox  
House Natural Resource Committee  
House of Representatives  
Capitol Station  
Helena, MT 59620

Dear Dick,

We are business owners in Montana. We have run the KOA Kampground in Three Forks for almost 20 years. We are thus well aware of why tourists come to Montana. They come because of the relatively pristine conditions of our environment. When members of the public claim a hazardous waste siting bill would lose jobs in Montana, they are not being very realistic. If anything, turning Montana into a source for the nation's hazardous waste burning will hurt, not help jobs. It will certainly hurt our business, as well as the State camping sites in this area, if the public knows there is a hazardous waste burning site only several miles away.

We strongly encourage you to support a strong hazardous waste siting bill. We want to encourage tourists to come to the state, not scare them away! We are also interested in our own quality of life. We are just like the tourists. We live in Montana because of the high quality of life it offers. We do not want to see this changed just to benefit a few special interests. It is very frustrating to see legislation directed to benefit private rather than public interests. These special interests cannot not provide the votes you need to get reelected.

Sincerely,



Sara Jane Johnson and Tom Glorvigen  
KOA Kampground  
Three Forks, MT 59752



March 13, 1993

EXHIBIT

44

DATE

3-17-93

HB

SB 338

Mr. Kane Quenemoen  
15 Jefferson Tracts  
Clancy, Montana 59634

Representative Dick Knox  
House of Representatives  
Capitol Station  
Helena, Montana 59620

Dear Representative Knox:

I am writing to ask for your support of Senate Bill 338, the Dangerous Waste Facility Siting Act. I am not opposed to incinerating hazardous waste in Montana, but I do not believe hazardous waste incineration technology in cement plants has been sufficiently developed, tested and proven to warrant disposal of lethal materials near our schools, waterways, and residential areas. Factors supporting passage of SB 338 and my view that hazardous waste can not be safely, consistently, and completely disposed of in cement kilns include the following:

1. Fifty-nine of sixty-one (97%) Helena area physicians voicing an opinion on this issue (see the Helena Independent Record Feb. 14, 1993) support SB 338. It stands to reason that they are more qualified to understand the human health implications of hazardous waste incineration than Tom Daubert and all of the other lobbyists hired by the cement industry to promote their interests at the Legislature.
2. "Upsets" common at Ash Grove and in other cement kilns, are known to emit massive amounts of uncombusted materials into the air. Particles of incomplete combustion of hazardous waste are known to contain dioxins, furans, lead, plutonium, mercury, cadmium, nickel, and zinc. 90 percent of the particles of incomplete combustion of hazardous waste have not been identified by the Environmental Protection Agency.
3. No amount of heat will destroy heavy metals contained in the hazardous waste that Ash Grove Cement intends to burn. Recent analysis of the content of hazardous waste indicates a 1.5 percent heavy metal content. Accordingly, the hazardous waste that Ash Grove Cement intends to burn will yield approximately 225 tons of lead, mercury, nickel, cadmium and zinc each year. The Environmental Protection Agency and the Montana Department of Health have concluded that the majority of heavy metal emissions, from stacks such as the one in use at the Ash Grove Plant in Montana City, settle in

close proximity to the original point of emission.

4. The Environmental Protection Agency, in June of 1990 designated Ash Grove Cement "a significant offender" of air quality standards governing particulate emissions.
5. Utah, Nevada, Washington, Oregon, North Dakota, Colorado, and Idaho have enacted hazardous waste incineration siting criteria. Wyoming and South Dakota are in the process of enacting hazardous waste incineration siting criteria. That all of the states surrounding Montana have addressed this issue, is an indication to me that it is important and worthy of our careful consideration.
6. In light of test results of cement kilns burning hazardous wastes in the United States, the Environmental Protection Agency is considering placing a moratorium on new chemical waste incineration applications until a thorough review of human health implications has been completed.

I have attached a photograph of the Ash Grove Cement plant at Montana City. The Montana City School, two daycare centers, and hundreds of private residences are situated within a mile radius of the plant. The picture depicts normal stack emissions from the kiln which is fired with traditional fossil fuels. In deliberating SB 338, please consider the anguish and uncertainty that Montanans, like yourself, living and attending school in the shadow of the plant, would experience knowing that Ash Grove Cement was incinerating lethal substances including arsenic, lead, mercury, cadmium, chromium, benzene, nitro-benzene, chlordane, endrin, and pentachlorophenol with the blessing of Montana's Legislature.

Responsible siting of hazardous waste burning facilities in Montana is not, as industry lobbyists try to depict it, a jobs or an ideological issue. It is a health and safety issue that will impact our children, our economy, our schools, our natural resources, our property values, and our very quality of life. Given the unrefutable risks and uncertainties associated with hazardous waste incineration, the siting requirements contained in SB 338 deserve your support. Thank you.

Sincerely,



Kane Quenemoen

EXHIBIT 449  
DATE 3-17-93  
HB SB 338

Anita Quenemoen  
15 Jefferson Tracts  
Clancy, MT 59634

Honorable Dick Knox  
House of Representatives  
Capitol Station  
Helena, MT 59620

Dear Sir:

As a resident of Montana City, and neighbor to the Ash Grove Cement Plant, I am writing to express my support for the Dangerous Waste Incineration Facility Siting Act, SB338. I must say that I am alarmed at the experience of this bill in the Senate. How can a bill with such overwhelming public support be, for all practical purposes, killed? I can only think of one answer, lobbyists.

The lobbyists who are pressing for defeat of this legislation, who are paid by industry to spend their days at your elbow, have put their "spin" to this issue, which is that this is an environmental and public responsibility issue. The crux of that "spin", is that we as Montanans are producing hazardous waste, and have an urgent and overriding need to dispose of this waste responsibly. The responsible solution to this problem is to burn hazardous waste in cement kilns.

If this was such an overriding issue to Montana, why was it not an issue before the cement plants publicized their proposals to burn hazardous waste? Because, in truth, Montana produces very little hazardous waste, which is currently being disposed of in a responsible fashion. In fact, Montana does not produce enough waste to keep the proposed facilities supplied at a profitable level. This means large scale importation of waste from out-of-state, at least 85%. Because, in truth, the overriding motive for the cement plants to burn hazardous waste is to greatly increase their profit margins, not to provide a "public service" to Montanans to relieve a mythical serious hazardous waste disposal problem. This additional profit will ultimately end up, in the case of Ash Grove Cement, in England, and in the case of Holnam Cement, in Switzerland.

Now that we have cut through the smoke to the real motive of the cement plants, let's talk about the costs and benefits of such a proposal to Montanans. There are legitimate health concerns to siting hazardous waste incineration at the proposed sites. My research into this issue shows that the industry's claim of incinerating 99.9% of the proposed hazardous waste is misleading. This rate of incineration occurs only under ideal burning conditions, as well as only in the hottest part of the kiln. Kiln upsets can release toxic materials into the air. Those compounds not burned at the optimum temperature also escape into the stack, or combine into new organic compounds, Particles of Incomplete

Combustion (PICs). The EPA has been unable to identify 90% of the organic emissions produced by such incineration. The health effects of these emissions are unknown. The permitting rules address only normal burning conditions and known emissions. The most glaring health risk is that heavy metals, particularly lead, will be emitted from the stack, and will accumulate over time in the surrounding areas. No amount of heat will destroy heavy metals. Department of Health studies show that most heavy metals fall within the immediate vicinity of the stack. This is of course dependent upon atmospheric conditions and stack height. However, we all know that the Helena and Gallatin valleys are subject to regular atmospheric inversions, particularly in the winter. In addition, the stack height of the cement kilns is very short. Regardless of whether the plants are appropriately permitted under current rules, there will be risk to public health within the immediate vicinity of the plants.

The cement plants stand to gain an income generating fuel source. We in the community and the state take all the risks. For example, I own a \$100,000 home in the Clancy/Montana City area. When I purchased this home, there was no hazardous waste incinerator in the neighborhood. The rules of the game have changed, and falling property values could destroy our investment. My 19 month old son attends a daycare center 1/2 mile from the Ash Grove plant and will attend the Montana City School, also 1/2 mile from the plant. If hazardous waste is burned at the plant, he will be the guinea pig used over the next 20 years to prove whether products of incomplete combustion are harmful, as well as what levels of lead ultimately cause mental retardation, learning disabilities and stunted growth. Recent studies show that even the lowest levels of lead can have such an effect. These are legitimate concerns!

This is a public health issue, and an economic issue. I am not saying that we should not burn hazardous waste, I am saying there are better places to do it. How can you respond to a lobbyist's query "What are we going to do with this stuff"? The answer is, what we have been doing with it. It is not incumbent on Montana at this time to site a hazardous waste incinerator. There is more than enough capacity available in the Region, particularly in Utah. When it does become necessary, let's put one where it will have the least impact on public health and the economy. True, this act will mean that the cement plants will be prevented from becoming hazardous waste incinerators. It is always a balancing act when an issue involves protecting the public health and maintaining industry and jobs. However, this is not a jobs issue. The cement plants are operating profitably now, and the passage of the act will not cost jobs. There are no other plants within the selling areas of our plants that burn hazardous waste to compete with. And even if there were, shouldn't public health come first?

We as a community and a state, are once again allowing an industry to achieve short term gain for our long term pain. Have we not learned our lessons from the wasteland surrounding the Anaconda Smelter, and the EPA superfund site in East Helena? We, as

Montanans, deserve better, and demand better. Let's enter this business of incinerating dangerous waste cautiously and responsibly. SB338 is good and appropriate legislation to protect the people of Montana, particularly children, our most vulnerable population, as well as our economy. This time around, let's remember that Montana and its residents will be here long after Ash Grove Cement is gone. In light of the risks posed to our state, community and children, I do not think this legislation is unreasonably burdensome to the industry.

As a closing note, I am a full-time working parent, and have taken countless hours of personal unpaid time away from my family and job to research this issue as best I can and to communicate to you my view. Yet it is obvious that I still cannot compete with paid lobbyists. I only hope that you can see my point of view, and appropriately represent myself and the thousands of other Montana citizens who support this legislation. I urge you to support this bill. Thank you.

*Anita Zellner*

EXHIBIT 44a  
DATE 3-17-93  
SB 338

EXHIBIT 45  
DATE 3-17-93  
~~HB~~ SB 338

FAX 444-4105

Dick Knox, Chairman  
House Natural Resource Committee

Dave Anderson is correct! The pro-hazardous waste burning testimony is lacking in honesty and believability!!

And he is right when he says that our children and waterways do not deserve to be used as guinea pigs for any corporation's bottom line. The health hazards of waste burning are still unknown. A three mile buffer zone is certainly a minimum requirement. The locations of these two plants is unfortunate for the corporation (near schools and waters); however, the potential risks involved are too great for an unproven technology. Support SSB 338, please.

Sandee Spendlove  
1919 Grizzly Gulch  
Helena, Montana 59601

To whom it may concern 46  
3/16/93  
This is in reference to HB 338.  
While I am fully aware of  
the need to dispose of our  
toxic wastes, it seems clear  
that all the facts are not  
in on its use as fuel for  
cement kilns. In addition  
I see no reason to import  
such wastes from out of  
state. Taking care of wastes  
generated in Montana should  
be our main concern and  
under no circumstances should  
Montana become a dumping  
ground for other states' problems.

Thank you  
Michael C. Bule

March 17, 1993

EXHIBIT

47

DATE

3-17-93

HB

SB 338

My name is Jim Hoyne. I have an undergraduate degree in Biology from St. Mary's College in Winona, Minnesota. I graduated from The Rockford School of Medicine at the University of Wisconsin. I now practice Emergency Medicine at St. Peter's Hospital in Helena.

I am not a toxicologist and I am not presenting myself as an expert in this field. However, as a physician, I do consider myself an advocate for health. I have spent a fair amount of time researching this subject and I would like to share my concerns with you. I do not intend this to be an exhaustive discussion of toxins nor do I want this to become a medical scare tactic. Instead I would like to present a general overview of this part of the issue, in order to give you some of the information you will need to come to your own conclusions.

There are 3 broad categories of constituents in the emissions from cement plant stacks that are of concern in human health. 1) particulates, 2) organic chemicals and 3) toxic heavy metals.

1) Particulates - These are of concern for two reasons: a) excessive inhalation of dust particles in general can cause skin disorders, eye irritation, lung disorders, and gastrointestinal tract disease and b) toxic metals and organic chemicals can adsorb to particulate surfaces and may be released when they contact skin or lung tissue. The industry attempts to limit the amount of particulates by passing the emissions through anti-pollution control devices which remove the majority of these particulates but given the large amount of materials processed significant amounts of particulates will be released into our environment. Also remember that under the BIF laws regulating cement kilns they can release up to 5 times more particulates than a specifically approved municipal incinerator of hazardous wastes. Where these particulates go depends on prevailing winds, precipitation and gravity. They can potentially contaminate the soil and water in our community. Realistically, unless you're in a cloud of this dust, breathing it in every day it's unlikely to do you much damage. Except that it can be the means to transport the more dangerous heavy metals and organic chemicals. So for this risk you need to consider weather patterns and proximity to the plant. Does the prevailing wind allow this material to drift and settle on our lands, water and most importantly, school?



but just the list for which BIF rules set emission standards.

Antimony, barium, lead, mercury, silver and thallium are regulated according to noncarcinogenic effects.

Arsenic, beryllium, cadmium and hexavalent chromium are classified as carcinogenic.

Studies comparing metal emissions from cement kilns show that lead and mercury are a statistically significant 2-3x increased when burning hazardous waste as opposed to conventional fuel.

Thallium is of particular concern as some forms of thallium are considered highly toxic with dermal contact being the primary route of entering the body. Little is known about the potential health effects from chronic low exposure.

Let's for a moment consider lead. I use lead poisoning as an example since it is common and in some ways more seems to be known about it. It has been known for years that lead in relatively large doses is toxic but what is now being discovered is that there are significant toxicities at very low doses. Children apparently are particularly vulnerable to the effects of lead and this susceptibility extends to long term chronic exposure.

Often the symptoms of chronic heavy metal exposure are nonspecific and hard to diagnose. They can be mistaken for fatigue or psychosomatic illness.

We used to define lead poisoning as a blood test which showed a level of 50 ug/dl. This was dropped first to 30ug/dl and now to around 10 ug/dl after studies showed effects at low dose. These problems in children and infants are seen as decreased cognitive abilities and behavioral disturbances such as hyperactivity and poor attention span. Some studies have shown that children with levels of 5-7ug/dl show hearing damage and damage to the central nervous system. If the levels are in the 10mg-15ug/dl range a 5-10 point decrease in IQ can be seen.

Yet a study for the US National Center for Health Statistics in 1984 revealed that 88% of American kids less than 6 years of age had blood levels of 10ug/dl or higher. Do we need to add to this?

EXHIBIT 47  
DATE 3-17-93  
SB 338

EXHIBIT 48

DATE 3-17-93

HB SB 338

March 17, 1993

State of Montana  
House Natural Resources Committee  
Helena, Montana

Dear Committee Members;

We are very concerned about the possibility of the State of Montana allowing hazardous waste burning in any form. We strongly support the siting bill that would ban burning hazardous wastes in facilities located near towns and schools. We would favor even more stringent controls as all hazardous waste burning is suspect. Recent studies have shown that the ash remaining is over 400 times more dangerous than originally thought. We feel further research will only confirm the dangers to public health of this controversial practice.

Our family moved from Billings to Bozeman several years ago due to continual health problems that had resulted from the sulfur dioxide pollutants present in the atmosphere in Billings. Only recently has it become apparent in Billings that the sulfur dioxide levels are two to four times the highest rate that the Environmental Protection Agency considers to be safe.

We are property owners in Bozeman and both work full-time at Montana State University. Our two young children attend the Bozeman Public Schools. We value the health and welfare of our family and sincerely hope that our state legislature will not allow the people of Montana to be subjected to an unsafe and controversial practice of hazardous waste burning.

Montana has some of the last and most unspoiled environment left in the lower 48 states. We feel that it is imperative that the legislature act in the best interest of all the people of Montana and not allow our health and the health of our children be put in jeopardy.

Sincerely,

*Steve and Joan Scarff*  
Steve and Joan Scarff  
214 S. Church Avenue  
Bozeman, Montana 59715

Written Testimony of Wade Sikorski Ph. D.  
House Natural Resources Committee  
SB 338  
March 17, 1993

Mr. Chairman and members of the committee,

I live and work on my family's ranch in Fallon County, where the Ross Electric Company has proposed a facility to incinerate PCB-contaminated electrical transformers. I would like to ask for your support on SB 338, the Dangerous Waste Facility Siting Act. This bill is just good sense. The facilities regulated by it would be handling the most dangerous chemicals that our civilization produces -- chemicals that have been proven to produce cancer, impair the immune system, and disrupt other bodily systems: sometimes in vanishingly small amounts, like mere parts per trillion. Surely some caution is in order to protect the public from these kinds of chemicals.

This bill has generated much debate about science and emotionalism. The bottom line is that science has not clearly established the distance necessary to keep the public safe. As a result, many members of the public become emotional when a dangerous waste incinerator is sited near a school -- or in the case of Baker, when citizens learn that a company with an appalling record of past violations and responsibility for Superfund sites plans to burn waste in close proximity to people's homes and agricultural land.

What is wrong with making sure that these facilities are sited a couple of miles away from schools, parks, and residential areas? Imagine what would happen if a truck carrying these chemicals started leaking, or, worse yet, had a wreck near a school. Leaks are inevitable, and wrecks do happen. It is simply prudent to anticipate them, and to try to make sure that they will happen somewhere where they will reduce the danger to the public.

Is it not the waste industry that has been making all sorts of exaggerated, unfounded and emotional claims about this bill; claiming it will outlaw incineration plants; that it is a plot by radical environmentalists to run their industry out of Montana; and that citizens are incapable of understanding and judging conflicting scientific claims about safety? It is almost like we are trying to get them to site their plants on the Moon. (Which actually wouldn't be a bad idea for some companies, like Ross Electric.)

Whether emotional or calculated, the waste industry's claims are misdirected. This bill would protect industry from liability as much as it would protect the public. By siting a plant away from populated areas and other areas where the toxic emissions could cause serious problems, this bill is actually protecting the hazardous waste industry from liability suits and large clean-up costs.

*Everyone* would gain from this bill and it really is hard to understand why the waste industry is opposed to it - unless it is simply a knee-jerk response, provoked by a hardened ideology. If the industry was truly conducting its business in a responsible manner, this bill would not even be necessary. After all, why would any industry handling such dangerous chemicals even *want* to site their facilities a short distance away from a school?

SB 338 has no radical agenda, it will not outlaw hazardous waste incineration. It won't even cost the hazardous waste industry anything. The siting requirements in it are just good common sense. Please support this bill. Thank you.

AGENDAOPPONENTS TO SB 338

- 
1. Jerome Anderson • Introduction  
Lobbyist for Holnam, Inc.
  2. Tom Daubert • Comments on Waste Streams in Montana  
Lobbyist for Ashgrove Cement Co.
  3. Stuart Weiss • Comments Re: Burn Proposal  
Senior Engineer, Holnam, Inc.  
Dundee, MI
  4. Dr. Katherine Kelly, Ph.D. • Comments Re: Safety  
of Burning Hazardous Waste in Cement Kilns  
Environmental Toxicology International, Inc.  
Seattle, WA
  5. William Springman • Management of Cement Kiln Dust  
Plant Manager, Trident Cement Plant  
Holnam, Inc.
  6. Dan Peterson • Economic Effect of SB 338 on the Montana City  
Cement Plant of Ashgrove Cement Co.  
Plant Manager, Ashgrove Cement Co.  
Montana, City, MT
  7. Charles T. Wiedenhoft • Economic Effect of SB 338 on the  
Trident Cement Plant of Holnam, Inc.  
Vice President and Technical Director  
Holnam Inc.  
Dundee, MI
  8. Additional opponents to the bill.

TESTIMONY OF TOM DAUBERT  
REPRESENTING ASH GROVE CEMENT COMPANY  
HOUSE NATURAL RESOURCES COMMITTEE  
SENATE BILL 338  
MARCH 17, 1993

I've been actively involved in Montana environmental issues for nearly 20 years -- always, in my opinion on the "pro-environmental" side. I know from that experience that all the testimony you have heard in support of this bill was sincerely delivered by genuinely concerned Montanans.

But it is important to emphasize that every single person in this room, regardless of his or her opinions of this bill or on the subject of hazardous waste disposal, cares equally about the health and safety of everyone. We all care about preserving Montana's one-of-a-kind, nationally unique environmental quality, and we all care about health and safety.

For example, the union members who work at the Ash Grove Cement plant, here to oppose this bill fervently, are just as concerned as neighbors are about the potential for adverse effects. After all, many of them live in the neighborhood, send their children to the same local school -- and all of them work right on-site, at the plant. The plant's employees are in the frontline here; they would be more exposed than anyone to any risks.

We all care about risks, and we should not allow the subject of hazardous waste disposal in Montana to divide us as a united, concerned people.

Senate Bill 338, unfortunately, takes an "us-vs.-them" attitude, and groups together various kinds of wastes that have never been grouped before, and proposes to have the same policy for all of them, regardless of their significant differences. The various kinds of wastes proposed under the definition of dangerous in this bill have radically different properties and preferred treatment regimens and potential risks. But this bill pretends they're the same.

This bill has been designed, it seems, to "rope in" various proposed waste-treatment facilities in Montana -- and the bill seeks to treat them all in the same way, despite their very significant differences.

You will learn more today about how the technology of a cement kiln is unique, how a cement kiln offers a waste-treatment capacity that is quite different and far superior to that of any incinerator. Cement kiln emissions are also far more strictly regulated.

Unlike some of the other proposals you've heard about, Montana's cement kilns already exist and are subject to stricter permitting requirements (for example, the other proposals you've heard about are not subject to the boiler and industrial furnace rules). This bill makes no

distinction between a facility that doesn't yet exist versus a facility that does. An existing facility, such as the Montana City cement kiln, has the potential actually improve its current impacts by using new technologies. This bill would preclude that opportunity.

This bill pretends that Montana's strictest-in-the-nation permitting and monitoring rules aren't good enough to do what they have been designed to do. Montana's boiler and industrial furnace rules make sure that nothing will be permitted unless it first proves its safety, regardless of location; and the rules make sure that everything that is permitted has no cumulative impacts and abides by the permit conditions. Senate Bill 338 pretends that a trial burn requirement and other special research that cement kilns would have to undergo don't exist.

This bill also pretends Montana has no rapidly worsening hazardous waste problem of its own. The facts are otherwise: our challenge is serious, and it's both economic and environmental.

Montana has the same problem as the rest of the country -- contaminations growing as a consequence of the improper disposal of hazardous wastes. (see poster) The specific problem illustrated here may be occurring more in Montana than in more urban America, however, because Montanans are more self-reliant; more of us work on our own vehicles, etc.

Unlike most of the country, Montana has no commercial treatment facility for its own hazardous wastes. (see Environmental Information Digest map, 1991)

In 1991, Montana's regulated industries reported to the health department nearly 14,000 tons generated; households generated an estimated 3,200 tons, all of which went to landfills; and an estimated 12,000 conditionally exempt small businesses generated up to another 14,000+ tons, much of which could have gone to Montana landfills.

And our waste generation is growing rapidly. Montana state health department files show this:

- \* The number of reports of waste generation filed by regulated businesses with the department grew by over 800% from 1985 to 1991.

- \* The generation of hazardous waste by "large-quantity" Montana industries grew by 60% over the course of most of the 1980s, but then in a single year (1990-1991) grew by 50%. The generation trend predicts continuing rapid growth.

- \* In 1991 Columbia Falls Aluminum became the state's largest single generator, because for the first time their spent potliner became regulated as hazardous. You'll hear later about how this has created new costs that in the future will begin to strike a sizeable annual blow to the plant's profits. Ironically, beginning next year this waste will have to be shipped to Arkansas, where it might end up being used as fuel in the Ash Grove cement plant in Foreman.

- \* More and more of our regulated waste is shipped out-of-state (over 50% in 1991). When the 1992 figures are compiled, they are projected to show a further major increase in the proportion of Montana's regulated waste that had to be shipped out-of-state for recycling,

processing and treatment.

\* Our waste is shipped to 20 different states, as far away as North Carolina. Some of Montana's wastes already end up being used as fuel in cement kilns in these other states.

\* The waste that isn't regulated isn't shipped -- it ends up in substandard Montana landfills -- or worse. There are numerous contaminations of drinking water in various sites around the state already, and many more are expected to develop in the future. Montana cannot now easily afford improvement in this situation, partly because we have no in-state treatment capacity and there is no incentive for anyone to get in the business of improving waste stream management.

\* Montana's existing cement kilns could provide a highly regulated, superior solution that's free to Montana taxpayers -- a remarkable deal, when you think about it. All they ask is the opportunity to prove their case through Montana's permitting process. Right now, Ash Grove imports enormous quantities of traditional fossil fuel, and proposes instead to substitute for up to 20% of its fuel, a customized, solid, non-pumpable and pre-packaged fuel. The fuel would consist of materials like spent potliner from Columbia Falls, refinery wastes, paints and paint thinners, paint brushes, used oils and solvents, printing inks, and protective clothing and dropcloths that have come in contact with these kinds of materials.

Finally, a word about trial burns, which Richard Knatterud of the health department described to the Committee several days ago. In a trial burn, which is one of a number of major features of the permitting process, a cement kiln has to prove it can meet health standards even under worst-case operating conditions. Fuels are required to be "spiked" with abnormally high content of metals and of organics that are known to be the most difficult to destroy; operating conditions, such as temperature and air intake, are required to be poor; and pollution control devices are "de-tuned" so they don't work properly. Under these kinds of adverse conditions, and recycling four times as much waste-derived fuel as is proposed in Montana City, Ash Grove's other cement kilns have passed these tests with flying colors.

Ash Grove asks you to preserve the company's eligibility to be studied thoroughly in Montana's permitting process. The company will need four separate permits.

The company's experience suggests that it can prove that use of waste-fuels in Montana City will:

- \* Be safe and entirely protective of health
- \* Be thoroughly and effectively regulated and monitored by government and the public
- \* Actually improve the plant's environmental impacts
- \* Secure the plant's economic future
- \* Contribute substantially to the economic situation of other Montana businesses
- \* Create tangible environmental improvements elsewhere in Montana
- \* Long-term, contribute to reductions in hazardous waste pollution in Montana
- \* Cost Montana taxpayers nothing

EXHIBIT 52  
DATE 3-17-93  
HB SB 338

**Testimony of Stuart Weiss  
before the  
House Natural Resources Committee  
Legislature of the State of Montana  
In Opposition to S.B. 338**

**March 17, 1993**

Mr. Chairperson and members of the committee:

My name is Stuart Weiss. I am Senior Process Engineer for Holnam Inc. I am grateful for this opportunity to speak to this committee.

First, I'd like to discuss the cement making process and why it's different from waste incinerators.

Cement kilns produce cement clinker by heating huge quantities of stone and clay to over 2600 degrees F - with a flame of over 3400 degrees F. This is far hotter, at least 1000 degrees hotter, than an incinerator. With a turbulent flame and a longer residence time than an incinerator, destruction of organic compounds in the fuel is virtually instantaneous in a cement kiln.

Let me briefly discuss the Holnam fuels program. Fuel substitution is a necessary step in cost reduction. We recognize that this endeavor requires public support. That is why, by listening to the community's concerns, Holnam has proposed to use solid fuels that pose no serious risk in the unlikely event of a spill.

The waste streams selected will enable Holnam to recycle a major portion of Montana's hazardous waste, thus serving Montana's disposal needs first. The solids include only three wastes: dry cleaning filters and lint, refinery wastes, and spent potliner from aluminum plants like the one in Columbia Falls.

We will not accept PCBs, dioxin wastes, radioactive wastes, pesticides and herbicides. Unlike an incinerator, we have focused on what is local and what makes a good fuel.

Our destruction capability is more than 99.99% - four nines - exceeding the regulatory requirements. It is fact. All of the kilns that did destruction and removal efficiency (DRE) tests in the USEPA's - sanctioned compliance tests, passed the tests. All of them exceeded four nines, even under worst case - near upset conditions. Most of them exceeded five or six nines.



EXHIBIT

53

DATE

3-17-93

HE

SB 338

**TESTIMONY OF DR. KATHRYN KELLY,  
ENVIRONMENTAL TOXICOLOGY INTERNATIONAL, SEATTLE,  
BEFORE THE HOUSE NATURAL RESOURCES COMMITTEE,  
LEGISLATURE OF THE STATE OF MONTANA  
IN OPPOSITION TO SB 338**

**MARCH 17, 1993**

GOOD AFTERNOON. MY NAME IS KATHRYN KELLY AND I AM A TOXICOLOGIST AND PRESIDENT OF ENVIRONMENTAL TOXICOLOGY INTERNATIONAL IN SEATTLE. MY PARTICULAR AREA OF EXPERTISE IS IN ASSESSING THE HEALTH EFFECTS OF BURNING HAZARDOUS WASTE IN HIGH-TEMPERATURE COMBUSTION FACILITIES, SUCH AS INCINERATORS AND CEMENT KILNS, WHICH I HAVE STUDIED FOR THE LAST THIRTEEN YEARS. THIS WAS THE SUBJECT OF MY DOCTORAL DISSERTATION IN PUBLIC HEALTH AT COLUMBIA UNIVERSITY. I HAVE ALSO STUDIED ENVIRONMENTAL TOXICOLOGY AT THE NEW YORK UNIVERSITY INSTITUTE OF ENVIRONMENTAL MEDICINE, AND I HAVE AN UNDERGRADUATE DEGREE IN HUMAN BIOLOGY FROM STANFORD UNIVERSITY.

I ALSO HAVE SEVERAL PROFESSIONAL AFFILIATIONS AND APPOINTMENTS, INCLUDING BEING APPOINTED BY THE GOVERNOR TO THE FIRST WASHINGTON STATE SCIENCE ADVISORY BOARD FOR SUPERFUND MATTERS; I AM A MEMBER OF THE AMERICAN COLLEGE OF TOXICOLOGY AND A REVIEWER FOR THE NATIONAL ACADEMY OF SCIENCES BOARD ON ENVIRONMENTAL STUDIES AND TOXICOLOGY AND ALSO FOR SELECTED US ENVIRONMENTAL PROTECTION AGENCY REPORTS ON INCINERATION. MOST RECENTLY I SERVED ON THE TEXAS AIR CONTROL BOARD'S CEMENT KILN TASK FORCE, WHOSE REPORT WAS PUBLISHED LAST MONTH. AS YOU SEE, THE TOPIC IS ONE I HEAV SPENT MY ENTIRE PROFESSIONAL CAREER ON, AND ONE THAT IS HIGHLY IMPORTANT TO ME AS I KNOW IT IS TO YOU.

AT ETI I SUPERVISE AN INDEPENDENT GROUP OF ABOUT 30 SCIENTISTS, PRIMARILY TOXICOLOGISTS AND CHEMISTS, WHO RESEARCH THE EFFECTS OF TOXIC ENVIRONMENTAL CONTAMINANTS ON HUMAN HEALTH AND THE ENVIRONMENT. WE WRITE THESE HEALTH RISK ASSESSMENTS ON BEHALF OF GOVERNMENT AGENCIES, INCLUDING MDHES, FOR INDUSTRY, AS WELL AS CITIZEN'S GROUPS, SUCH AS THE CITIZENS OF VALDEZ, ALASKA. WE ARE

THOUSANDS OF WORKERS RESIDENTS THROUGHOUT THE US, THERE HAVE NEVER BEEN HIGH RATES OF DISEASE ASSOCIATED WITH MAKING CEMENT, SUCH AS THERE ARE WITH OTHER DUST-GENERATING INDUSTRIES. IN FACT, WE KNOW FROM THE U.S. DEPARTMENT OF LABOR THAT THE OCCUPATIONAL RISKS OF MAKING CEMENT ARE APPROXIMATELY EQUAL TO THAT OF THE RISKS OF PRINTING NEWSPAPERS OR COSTUME JEWELRY, AND WELL BELOW THE RISKS OF CLOTHING MANUFACTURING COMPANIES.

WITH REGARD TO PUBLIC HEALTH IMPACTS, SOME RECENT DATA FROM THE STATE OF TEXAS LED TO SOME CONCLUSIONS YOU MAY FIND SURPRISING. NEAR DALLAS, THERE ARE THREE CEMENT KILNS WITHIN THREE MILES OF EACH OTHER, WHICH BURN A TOTAL OF 110,000 TONS OF HAZARDOUS WASTE EACH YEAR. THIS IS ABOUT TWICE THE TOTAL AMOUNT HOLNAM AND ASH GROVE ARE ASKING FOR PERMISSION TO BURN, MORE THAN 60 MILES AWAY FROM EACH OTHER. THE TEXAS AIR CONTROL BOARD HAS CONDUCTED ABOUT 7,000 ANALYSES OF THE AIR, WATER, SOIL, AND SO ON, SURROUNDING THESE FACILITIES TO DETERMINE THE POTENTIAL FOR ADVERSE IMPACTS TO NEARBY RESIDENTS; THERE ARE ABOUT 15,000 RESIDENTS WITHIN A FIVE-MILE RADIUS OF THE PLANT. OF THESE 7,000 ANALYSES, NOT ONE WAS FOUND TO EXCEED STATE HEALTH CRITERIA, AND THE TACB HAS ISSUED SEVERAL MEMOS STATING "NO ADVERSE HEALTH EFFECTS" WOULD BE EXPECTED TO RESULT FROM THESE EXPOSURES. THE RECENTLY-COMPLETED TEXAS TASK FORCE CONSIDERED THIS DATA, AND DID NOT CONCLUDE THAT ANY CHANGES TO THE PLANT'S PERMITS WERE NECESSARY.

TWO, IT IS NOW ABUNDANTLY CLEAR THAT THE EMISSIONS OF PRIMARY HEALTH CONCERN, METALS LIKE ARSENIC AND LEAD AND CHROMIUM, HAVE BEEN EMITTED FROM CEMENT KILNS FROM THE VERY FIRST DAY OF OPERATION AND WILL CONTINUE TO BE EMITTED, WITH OR WITHOUT THE USE OF HAZARDOUS WASTE FUELS. THE REASON IS THAT THE RAW MATERIALS -- THE SHALE, THE LIMESTONE, THE FLY ASH, AND SO ON -- ALL CONTAIN NATURALLY-OCCURRING QUANTITIES OF ALL THESE METALS ALREADY. EVEN MORE OF THESE SAME CONTAMINANTS ARE CONTAINED IN MANY CONVENTIONAL FUELS, LIKE COAL AND PETROLEUM COKE.

THAT'S WHY WHEN YOU USE HAZARDOUS WASTE FUELS LIKE SOLVENTS IN PLACE OF CONVENTIONAL FUELS LIKE COAL, YOU GENERALLY SEE A NET *REDUCTION* IN EMISSIONS OF METALS, NOT AN INCREASE, BECAUSE HAZARDOUS WASTE FUELS GENERALLY REPRESENT A *REPLACEMENT* OF FUELS CONTAINING METALS ALREADY, NOT AN ADDITION OF FUELS WITH NEW CONTAMINANTS.

THE SAME IS TRUE OF ORGANIC EMISSIONS -- THE VAST MAJORITY OF ORGANICS ORIGINATE WITH THE RAW MATERIALS, AND THE EXTREMELY HIGH TEMPERATURES ASSURE VIRTUALLY COMPLETE DESTRUCTION OF ALL ORGANICS BEFORE BEING EMITTED. DIOXIN MOST EMPHATICALLY IS **NOT** A PUBLIC HEALTH OR ENVIRONMENTAL PROBLEM, WHETHER IN AMBIENT AIR OR IN THE CEMENT KILN DUST OR IN THE CLINKER PRODUCT. IT IS NOT A TOXIC PROBLEM EITHER AT THE MEASURED CONCENTRATIONS, OR RELATIVE TO OTHER SOURCES OF DIOXIN WIDELY FOUND IN OUR COMMUNITIES SUCH AS IN CARS, WOODSTOVES, AND PESTICIDES. HIGH-TEMPERATURE COMBUSTION OF DIOXIN DESTROYS FAR MORE DIOXINS THAN IT CREATES, WHICH IS WHY INCINERATION IS THE PREFERRED MEANS OF DESTRUCTION OF DIOXIN-CONTAMINATED WASTES, WHICH OF COURSE IS NOT ALLOWED IN MONTANA.

THREE, THE SAME CONCLUSIONS HOLD TRUE OF THE CEMENT KILN DUST AND THE CLINKER PRODUCT. WITH REGARD TO POTENTIAL FOR ADVERSE IMPACTS TO HEALTH AND THE ENVIRONMENT, THERE ARE NO DIFFERENCES IN THE PRODUCT OR EMISSIONS OF CEMENT KILNS BURNING HAZARDOUS WASTE VERSUS THOSE THAT DO NOT, ACCORDING TO EVERY REPORT EVER PUBLISHED ON THE SUBJECT CONTAINING QUANTITATIVE DATA, INCLUDING ONE RECENTLY PUBLISHED BY THE NATIONAL SANITATION FOUNDATION WHICH WAS CONCERNED THAT WATER PIPES MADE WITH HAZARDOUS WASTE-DERIVED CEMENT WOULD CONTAMINATE DRINKING WATER. THEIR REPORT CONCLUDED THAT HAZARDOUS WASTE-DERIVED CEMENT DOES NOT LEACH METALS ANY DIFFERENTLY THAN CEMENT MADE WITHOUT HAZARDOUS WASTE FUEL. FURTHERMORE, USEPA HAS CLEARLY STATED IN SEVERAL REPORTS THAT THERE ARE NO SUPERFUND SITES THAT HAVE BEEN DECLARED SO BECAUSE OF LEACHING OF METALS, DIOXINS, OR ANY OTHER CONTAMINANTS FROM CEMENT KILN DUST. FINALLY, WE HAVE A REPORT BEING PUBLISHED ON FRIDAY SUMMARIZING THE RECENT EPA TESTS OF DIOXINS IN CEMENT KILN DUST. THIS REPORT SHOWS THAT THE RISKS OF DIOXINS IN WOODSTOVE ASH, AND IN FACT IN MANY OF OUR FOOD PRODUCTS,

SUCH AS FISH AND EGGS AND MILK, ARE HIGHER THAN THE RISKS OF DIOXINS IN CEMENT KILN DUST. BIOACCUMULATION OF DIOXINS AND INDIRECT EXPOSURE THROUGH THE FOOD CHAIN LIKEWISE ARE NOT A PROBLEM AT CEMENT PLANTS. WE WOULD BE HAPPY TO PROVIDE YOU WITH THAT REPORT IF YOU ARE INTERESTED.

SIMPLY PUT, WE KNOW MORE ABOUT THE RISKS TO HEALTH AND THE ENVIRONMENT FROM BURNING HAZARDOUS WASTES IN CEMENT KILNS THAN WE KNOW ABOUT VIRTUALLY ANY OTHER HAZARDOUS WASTE TREATMENT METHOD AVAILABLE, WE KNOW THOSE RISKS ARE LOW, AND WE KNOW THAT CEMENT KILNS ARE THE MOST ENVIRONMENTALLY BENEFICIAL MEANS OF PERMANENTLY DESTROYING MANY TYPES OF WASTE. IN FACT, I WORK ABOUT A MILE AWAY FROM A LARGE CEMENT PLANT WHICH SUCCESSFULLY DESTROYS MANY TYPES OF WASTE, SO THIS IS A RISK I LIVE WITH EVERY DAY MYSELF AND ONE I DO NOT TAKE LIGHTLY. FURTHERMORE, I WOULD NOT HESITATE TO LIVE NEAR THE HOLNAM OR ASH GROVE FACILITIES IN MONTANA OR SEND MY CHILDREN OR RELATIVES TO SCHOOL THERE.

#### **IMPLICATION FOR SITING BILL**

WHAT ALL THIS MEANS IS THAT A SETBACK FOR CEMENT KILNS IN GENERAL AND TRIDENT IN PARTICULAR MAKES NO SCIENTIFIC OR ENVIRONMENTAL SENSE WHATSOEVER. FURTHERMORE, SUCH A BILL MAKES NO POLITICAL SENSE, EITHER -- NO OTHER STATE HAS LEGISLATION LIKE THIS ON THE BOOKS. THE CLOSEST WOULD BE THE STATE OF UTAH, WHOSE LEGISLATION CONTAINS AN IMPORTANT VARIANCE WHICH WOULD ALLOW CEMENT KILNS WHICH CAN BE SHOWN NOT TO POSE ADVERSE EFFECTS TO HUMAN HEALTH TO BE EXEMPT FROM THIS SETBACK. CEMENT KILNS OF THE CALIBER OF THE TWO HERE IN MONTANA COULD READILY DO, AND WOULD BE ALLOWED TO OPERATE IN THE STATE OF UTAH PROVIDED ALL PERMIT CONDITIONS ARE MET. THE SAME HOLDS TRUE OF THE INCINERATOR IN EAST LIVERPOOL AND THE STATE OF OHIO'S REGULATIONS REQUIRING A SETBACK FROM POPULATION CENTERS -- THE VARIANCE IN OHIO'S LEGISLATION ALLOWED THE FACILITY THE OPPORTUNITY TO PROVE TO THE STATE SITING BOARD A LACK OF ADVERSE HEALTH IMPACTS TO LOCAL RESIDENTS, AND THE STATE THEREFORE ALLOWED THE FACILITY TO SITE THE PLANT LESS THAN A QUARTER MILE FROM AN ELEMENTARY SCHOOL.

**Testimony of Bill Springman, Plant Manager  
Trident Cement Plant  
Three Forks, Montana  
Before the House Natural Resources Committee  
Legislature of the State of Montana  
In Opposition to S.B. 338**

**March 17, 1993**

Mr. Chairperson and Members of the Committee:

My name is Bill Springman. I am the plant manager at Holnam's Trident plant.

I have over 30 years of cement manufacturing experience. I have been responsible for Trident plant operations since 1979 and have specific knowledge of the operation of the plant, including the management of cement kiln dust, which you've been hearing a lot about lately.

Unfortunately, most of what you've been hearing is wrong.

There is a misconception about the fate of cement kiln dust. The material is primarily composed of the same elements that we use to make cement. It is not ash. It is primarily limestone.

Now, allow me to clarify how cement kiln dust at the plant is managed. Cement kiln dust is captured in the kiln dust collection equipment. The dust is taken from the dust collector, mixed with water, and transported to the quarry where it is returned to the areas from which it was originally extracted. As part of this systematic quarry reclamation process, we use the dust to fill in and contour the quarry. We then seed these areas with native vegetation and the reclaimed areas support the growth of this vegetation.

The plant has full time personnel who operate water trucks to wet the quarry roads and prevent excessive dispersion of the dust due to wind. All plant roads are sealed and treated with dust suppression materials.

Our plant is clean. Our employees take a great deal of pride in their ability to manage cement kiln dust effectively. I would like to take this opportunity to extend to each of you an invitation to come and visit the plant and make your own evaluation, instead of relying on secondhand information.

Thank you for your valuable time and consideration.

Mr. Chairperson and  
My name is Bill Springman. I am

I have over 30 years of cement manufacturing  
Trident plant operations since 1979 and have spe  
plant, including the management of cement kiln dust, w  
about lately.

Unfortunately, most of what you've been hearing is wrong.  
There is a misconception about the fate of cement kiln dust. The material is prima  
composed of the same elements that we use to make cement. It is not ash. It is  
primarily limestone.

Now, allow me to clarify how cement kiln dust at the plant is managed. Cemen  
dust is captured in the kiln dust collection equipment. The dust is taken from  
collector, mixed with water, and transported to the quarry where it is returne  
areas from which it was originally extracted. As part of this systematic  
reclamation process, we use the dust to fill in and contour the quarry.  
these areas with native vegetation and the reclaimed areas support the g  
vegetation.

The plant has full time personnel who operate water trucks to v  
prevent excessive dispersion of the dust due to wind. All plant  
treated with dust suppression materials.

PH.

FUE.

IMPAC

YEARS 1

YEARS.

## SUMMARY

AT THE END OF 1

DO CEMENT KIL

COMMUNITIES OR N

DATA IS THAT CEMEN

TECHNOLOGY WITH AN E.

THE MOST ENVIRONMENT.

TYPES OF WASTES OUR SO

VALUE INTO A USEFUL PROD

IMPACTS TO THE SURROUNDING

EFFORTS SUCH AS IMPOSING SE.

SUCH AS TRIDENT MAKE NO SCIE.

SENSE. THESE FACILITIES CAN AND

THAT THEY ARE SAFE FOR SURROUND.

OR THREE MILES AWAY -- THIS IS THE ONLY WAY TO ENSURE LONG-TERM  
PROTECTION OF PUBLIC HEALTH AND THE ENVIRONMENT IN MONTANA.

PASSING THIS BILL IS NOT A VOTE AGAINST HAZARDOUS WASTE IN MONTANA -

- IT IS A VOTE AGAINST MONTANA'S BEST OPTION FOR EFFECTIVELY  
MANAGING THESE WASTES. I STRONGLY URGE YOUR OPPOSITION TO THIS

BILL. THANK YOU FOR YOUR INTEREST IN THIS VERY IMPORTANT ISSUE, AND I  
WOULD BE HAPPY TO ANSWER ANY QUESTIONS YOU MAY HAVE.

DATE 3-17-93HB SB 338**Hazardous Waste Incinerator Siting Criteria in 11 Western States**

	UT	NV	WA	OR	WY	SD	ND	TX	CO	ID	MT	Total	MT
State mandated siting criteria	X	X	X	X	a	b	X	X	X	X	c	10	d
Distances specified	X	X	X	X	a			X	X			7	X
Capacity Needs Assessment				X		X	X	X				4	
Homes, schools, towns, gathering places	X	X	X	X	X			X	X	X		8	X
Population density				X					X			2	
Parks, recreation areas	X	X	X	X				X				5	X
Airports				X								1	
Surface water	X	X	X	X	X			X		X		7	X
Ground water/wells	X	X	X	X	X		X		X	X		8	X
Flood plains (100/500 year)	X	X	X		X			X				5	X
Wetlands		X	X		X							3	X
Aquifer recharge zone	X						X			X		3	
Precipitation levels			X									1	
Farmlands- prime/unique	X		X									2	X
Soil permeability			X				X		X			3	
Faults (Holocene, "active")	X			X	X			X		X	X	6	X
Mudflow, earth movement	X			X								2	X
Other geological features	X	X			X							3	
Dam failure, flood areas	X											1	X
Avalanche areas					X							1	
Wilderness/wilderness study areas	X		X	X								3	X
Wild & Scenic Rivers	X		X	X	X							4	
Sensitive/unique areas				X								1	
Endangered species habitat and/or big game range	X	X			X							3	
Historical/archaeological sites	X		X	X	X							4	
Viewsheds				X								1	
Highway setbacks (state/federal)					X							1	
Transportation risks								X				1	
"Climactic conditions"									X			1	X
"High topographical relief"							X					1	
Air quality concerns			X									1	
Where poses concerns for cancer and/or "chronic toxic effects"					X							1	
Local zoning/controls			X	X				X	X			4	X
Setbacks from property lines				X				X		X		3	
State Dept. of Environment/Health handles permitting		X	X	X	X	X	X	X	X	X	X	10	X
Appointed committee or board handles permitting	X											1	

a) Mandated, currently being drafted.

b) In process; information based on S.D. Citizens' Advisory Committee on Hazardous Waste Management, Executive Report and Recommendations, July 1992. Specific criteria are beyond the scope of the Committee. However, recommendations for "geological, biological and human considerations" are suggested.

c) At this time, only federal standards apply to Montana; there is a single criterium under these standards.

d) Proposed under SB 338.



TESTIMONY OF DAN PETERSON  
ASH GROVE CEMENT COMPANY, MONTANA CITY PLANT  
HOUSE NATURAL RESOURCES COMMITTEE  
SENATE BILL 338  
MARCH 17, 1993

My name is Dan Peterson, and I am plant manager of the Ash Grove cement plant in Montana City.

I grew up in Montana and earned my chemical engineering degree from Montana State University. I ended up working out-of-state in the cement industry, and was involved in the introduction of waste-derived fuels at the Ash Grove plant in Foreman, Arkansas. The Foreman plant has used waste-fuels for seven years now, with no adverse environmental or health impacts. Ironically, some of the hazardous waste that is recycled in Arkansas already comes from Montana, and more of our waste may be on the way.

For the record, Mr. Chairman, I would like to submit copies of a letter that the former Speaker of the House of Representatives of Arkansas has sent to you and other members of the committee. Mr. Crank, of Foreman, Arkansas, is the nearest neighbor to the Ash Grove cement plant, and has lived in the same home since 1943.

All three of the Ash Grove cement plants that use waste-derived fuels have proven in their trial burn tests that even under worst-case conditions, emissions are far, far below conservative health-based standards. And the other kilns were using four times the quantity of waste-fuel that we propose for Montana City.

We are prepared to invest in Montana's strict permitting process because we are convinced we can prove the safety of our Montana proposal to all concerned. We believe we can prove that the use of waste-fuels will actually reduce our plant's environmental impacts, including its impacts on air quality. We also believe we can demonstrate how this technology will create environmental improvements for Montana. And we can prove that this recycling technology will offer significant economic benefits to many other Montana businesses.

For our cement plant and the people and businesses who depend on us, this issue has major direct economic significance -- a subject that has been misrepresented by our opponents in the past. The fact is that the *long-term* survival of our plant *depends* on the kind of cost-reduction that only major energy savings can bring. Already, we compete for all our out-of-state sales -- half our annual production -- with plants that are larger, more energy-efficient, with substantially lower operating costs, lower taxes, lower payroll, insurance and workers comp costs, and lower transportation costs in distant markets. Already, we cannot compete effectively against these other plants.

EXHIBIT 70  
DATE 3-17-93  
HB SB 338

HOME PHONE 542-6270

MARION H. CRANK  
ROUTE 1, BOX 75  
FOREMAN, ARKANSAS  
71836

March 15, 1993

Honorable John A. Mercer  
Speaker, Montana House of Representatives  
Montana State Legislature  
Capitol Station  
Helena, Montana 59620

Dear Speaker Mercer:

Greetings from one Speaker to another!

I am a former member of the Arkansas House of Representatives, having served for 18 years. During this time I served as Speaker of the House, three terms as chairman of the Joint Budget Committee, and 17 years as a member of the Legislative Council of Arkansas. I was the Democratic nominee for Governor in 1968, and have had the pleasure for many years of knowing and working with Bill Clinton.

I am also the nearest neighbor to the Ash Grove cement plant in Foreman, Arkansas, living about one-half mile away. As you may know, waste-derived fuels -- including wastes that were generated in Montana -- have been used successfully at this plant for the past seven years, in quantities that are four times as great as the amount of waste-fuel Ash Grove proposes to use in Montana.

I write to assure you that, contrary to what you may be hearing, there have been no negative effects of this technology in Arkansas. I have lived in the same home since 1943, so I have on-hand experience with life next door to a cement plant, and I can tell you there has been no difference in our living conditions, and no detrimental effects on our health or environment, since the introduction of waste-fuel technologies.

Neither have there been any negative effects on property values whatsoever. My personal experience completely contradicts any fear that might be expressed by Montanans.

As one legislator to another, let me urge you not to abolish any possibility of considering this excellent manner of waste disposal. It's an environmental solution that also benefits the economy. It strikes me as unnecessarily expensive and burdensome to Montana businesses to ship Montana waste all the way to Arkansas for fuel use if a Montana cement kiln can do the same job. I encourage you to give Ash Grove an opportunity to prove its technology in Montana.

Honorable John A. Mercer  
Page 2  
March 15, 1993

I will be happy to talk with you, or any other member of the Montana House of Representatives, about my experiences with waste-recycling in cement kilns. (Telephone number: 501-542-6270)

I wish you success as you consider this important subject.

Sincerely yours,

  
Marion H. Crank

MHC:cl

**Testimony of Chuck Wiedenhoft  
Vice President and Technical Director  
Holnam Inc.  
Before the House Natural Resources Committee  
Legislature of the State of Montana  
In Opposition to S.B. 338**

**March 17, 1993**

Mr. Chairperson and Members of the Committee:

My name is Chuck Wiedenhoft. I am Vice President and Technical Director for Holnam Inc. Among my responsibilities are managing the permitting process and implementation of alternative fuels, both hazardous and non-hazardous, at my company's cement plants.

I am grateful for this opportunity to speak with you today on what is an important matter to my company and to Montana. Holnam believes that it is important that you hear what our company's position is from an officer of the company and that our message be clear.

My opposition to S.B. 338 will concentrate on the impact the bill would have on the continued operation of the Trident plant.

Holnam must maintain the ability of the Trident plant to be competitive in the cement market. Over twenty-five cement plants are currently using waste fuels in the United States. The ability of these competitors to offset purchases of coal or natural gas with waste fuel makes it possible for them to produce cement at a lower cost and sell it for a lower price. Holnam has addressed this issue by making the use of waste fuel to reduce costs a critical part of its strategic plan

The issues of economics and jobs have been put before you by supporters of the bill. They have said that these issues are not relevant to the bill. They are wrong.

As a result of the movement of this bill, and the ultimate impact that it could have if it becomes law, we are reassessing what the long-term options for the Trident plant. We have given consideration to the changes this bill could potentially have on our cost reduction strategy. The option of plant closure becomes more realistic if, in the future, our planned use of waste fuels is prevented. Fuel prices continue to rise, and the proposed BTU tax could mean an additional cost to the plant of approximately \$540,000 per year.

In addition the Trident plant has recently lost 84,000 tons of cement sales as a direct result of its inability to be competitive with lower cost producers. The plant is in jeopardy of losing another 20,000 tons of sales to a state owned cement plant in South Dakota. Altogether, this total represents nearly one-third of the plant's annual production capacity.

The Trident plant has diligently pursued waste fuels. They have been open with information, and they have listened to concerns expressed over the past 18 months. Confirmation of this came recently when we changed our plans to eliminate all free-flowing liquids from their program.

The technology we are planning to use is not new or uncertain, as opponents to it have presented. It has been in place worldwide for over twenty-five years, thereby creating a wealth of information about its viability. The validity of the process has been confirmed by actual experience over this time, not just theory.

Let me again assure you that the issues of economics and jobs are very relevant to this bill. Holnam must be allowed to keep the Trident plant competitive. Passage of S.B. 338 will impede our capability of making this possible. Passage

DATE 3-17-93  
HB SB 338

House Committee on Natural Resources  
SB 338  
March 17, 1993

Testimony of Larry Craft  
President, Aluminum Workers Trades Council  
Columbia Falls Aluminum Company

Mr. Chairman, members of the Committee, my name is Larry Craft. I am union president of the Aluminum Workers Trades Council at the Columbia Falls Aluminum plant. I am here to testify on behalf of the approximately 540 union workers at CFAC.

As I understand SB 338, it would stop the incineration of dangerous wastes within 3 miles of any dwelling or stream flow. This means that a cost effective method of disposing of this waste through the kilns of Montana's cement factories would be eliminated.

The supporters of this bill include many people with genuine concerns about how hazardous waste might hurt their families. I, too, have a family and would share those concerns if I didn't have the knowledge I have of our business.

CFAC started producing aluminum in 1955 and today employs 680 people who make one million pounds of aluminum per day. Our plant has 600 electrolytic cells, or pots as they are commonly called. Each pot has an average life of approximately four to five years, at which time it has to be rebuilt. A byproduct of the rebuilding process is spent potliner.

CFAC produces 6,000 tons per year of spent potliner, which contains a BTU value of approximately 5,800 BTU/pound. This is about 65-70% of the BTU value of Colstrip coal.

We at Columbia Falls Aluminum Company currently truck our 12 million pounds of potliner out of Montana to be buried in landfills in Idaho and Utah, where it really never goes away.

(over)

Hauling hazardous waste from Montana to other states does not solve our country's waste problems.

The small percentage of cyanide (0.1% CN) in our potliner is what causes it to be listed as a hazardous waste. Potlining creates hazardous conditions only when water leaches through potliner waste piles and extracts cyanide. The cyanide-bearing leachate then becomes an environmental concern. When potliner is used as a fuel supplement in cement production, the cyanide is thermally destroyed by the roughly 2500°F operating temperatures of the cement kiln. The various other oxides and fluoride compounds become part of the cement. There is no waste residue. Environmentally, this is far better than shipping the potliner to a hazardous waste landfill, where it could come back to haunt us in the future.

Federal and state hazardous waste regulations make it virtually impossible to issue a permit to burn wastes unless it is proven safe. In addition, EPA and Montana air quality regulations require emissions to be safe before a permit is issued. In short, DHES will not allow a facility to be permitted unless it is in full compliance with state and federal regulations. Further, members of the public must be notified of a permit application and can comment on all facets of the permitting process.

The State of Montana currently has one of the toughest permitting policies in the Nation. Let's trust our state employees to carry out that policy. They have the proven ability to make informed decisions. They must involve the public in making those decisions. In short, we have a good process in place. Let's trust that process.

On behalf of my 540 union brothers and sisters, I urge you to vote against this legislation.

Testimony of Raymond R. Sorenson  
Columbia Falls, Montana  
before the  
House Committee on Natural Resources  
SB 338  
March 17, 1993

Mr. Chairman and members of the Committee, I am Raymond R. Sorenson, an officer and a member of local 320, Aluminum, Brick and Glass International Union. Our local has 380 members at Columbia Falls Aluminum Company (CFAC).

Earlier, you heard my fellow union member, Larry Craft, testify. I will not repeat his comments. However, there are other points I want to emphasize.

As a third generation Montanan, I love Montana, and I would like to have jobs in Montana so that my children can live and work here if they choose to.

Earlier this month, when this bill was heard in the Senate, many people said that it is not safe to burn hazardous waste. Others said that if it is unsafe, it should be done in Eastern Montana. My view is different. If it is not safe, hazardous waste should not be burned anywhere. If it is safe, why should hazardous waste only be burned in Eastern Montana?

Yesterday, I was asked by a member of the press if the management of my company had somehow threatened us with losing our jobs if SB 338 were to pass. The short answer to that question is no. Further, I resent the question, because I have worked at the Columbia Falls plant since 1967, and I don't live in a vacuum. Our Union, throughout the years, has fought hard, tough battles with the company management over various issues.

SB 338 would prevent the two cement producers in Montana from burning my company's spent potliner. Mr. Wiseman, one of the chief supporters of SB 338, says that this bill is not a "job issue." He is wrong. It could be a "job issue", maybe not his, but maybe mine and other good union jobs.

One thing that concerns me is why was this bill introduced in the first place? The citizens of Montana employ professional staff at the State Department of Health and Environmental Sciences. Some of these employees testified



before this Committee last Monday to explain the permitting process. I don't know about you, but I was impressed. Their dedication and their apparent understanding of the technical issues was impressive to me. I am grateful that we have such people deciding whether or not to issue a permit to burn hazardous waste.

Also, the Governor appoints competent people to the State Board of Health and Environmental Sciences to hear testimony on these issues.

My Union strongly supported the creation of Montana's permitting process. Why? Because we, as workers, are concerned about our safety and the safety of people in our communities. We want to be sure that there is a good process in place so that this pollution will not threaten our lives.

Fortunately, such a process is in place. What troubles me is that this bill would destroy that process. I do not mean any disrespect to this Committee, but quite honestly, I prefer that competent, technically trained people make decisions about how dangerous waste will be handled. In my view, that is better than laymen, like you and me, making such decisions.

In conclusion, given the excellent permitting process already in place, I believe it is unreasonable to pass legislation to stop a facility from even applying for a permit.

On behalf of my fellow employees, I urge you to vote no on SB 338. Thank you.



LEWIS AND CLARK

# CITY-COUNTY HEALTH DEPARTMENT

City-County Building  
316 North Park  
Box 1723  
Helena, Montana 59624  
Telephone 406 / 447-8200

EXHIBIT 60  
DATE 3-17-93  
HB SB 338

March 17, 1993

## TESTIMONY ON SB NO. 338

I have been in the business of protecting the public's health for almost 20 years. In that time I have come to understand that effective protection must be based on good science. I have seen some sound, scientifically based health legislation come out of this body. Ladies and gentlemen, this bill is not good public health legislation.

The fears that these good people have are real. But a fear that is real to them may or may not have any basis in truth. That is where science comes in. And that is where this bill fails.

There are three givens one must work with when dealing with an issue such as this.

1. NIMBY - no one wants this in their backyard, regardless of how safe it is proven to be.
2. Everyone wants technology to allow them to live exactly the lifestyle they chose, without restriction.
3. Everyone wants Zero Risk from the pursuit of their chosen lifestyle.

You cannot have zero risk as long as you are alive. Everything you do confers a risk to you and those associated with you (family and community).

There is no longer a place in this world that isn't **SOMEBODY'S** backyard.

As long as we pursue our current lifestyles we will produce hazardous waste. That hazardous waste will present a risk to us. We have to determine what the risk of an action is - then weigh that risk against the benefits. The tools of science are what we must use to help us make those decisions. To turn our back on science, as this bill does, is to cast our fate, our Public Health, with the forces of hysteria and half truths.

Environmental groups talk often about the dangers of externalizing the true costs of our lifestyles. For example, they oppose "hiding the real costs of disposing of the solid waste that our lifestyles produce" by blending recycling costs into the overall costs of landfilling.

If we force the siting of the means of disposing of the hazardous wastes out of sight before the risks are scientifically determined we are engaging in just another kind of externalizing. Don't decide the best course of action, just ship the problem into somebody else's backyard.

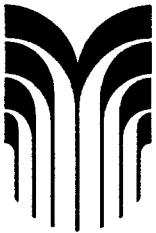
I do not support or oppose the burning of hazardous materials in cement kilns.

I support the rational, measured, SCIENTIFICALLY VALID study of the risks involved. Only then can sound decisions be made about what is in the best interests of the public's health.

Respectfully submitted,

A handwritten signature in cursive script that reads "Will I. Selser". The signature is written in dark ink and is positioned above the typed name.

Will I. Selser, Director  
Environmental Health Division



**Special  
Resource  
Management** INC.

EXHIBIT 61

DATE 3-17-93

HB SB 338

P.O. Box 4168 • Butte, MT 59702  
(406) 782-4201 • (800) 735-8964 • (406) 782-9968 FAX

*A Montana Power/Entech Company • AA/EOE M/F*

**Testimony before the House Natural Resources Committee on SB 338, March 17, 1993**

SRM is a full service hazardous waste management and environmental services company that has been serving the regulated community in Montana and surrounding states for seven years. In the course of our business, we have successfully applied siting criteria to different types of waste management facilities to evaluate alternatives and quantify potential effects on people and the surrounding environment.

On Monday, the Montana DHES discussed in detail with you their permitting process for hazardous waste facilities, in particular BIF proposals. Having recently participated in the permitting process for our Part B permit, we know the department's rules and procedures to be thorough, rigorous and complete. Public involvement is substantial in the permitting process and becomes even more extensive when an EIS is performed. The permitting rules and activities conducted during an EIS consider siting issues and the potential effects of a specific facility on the surrounding area, including the potential effects on public health. As such, many siting criteria are considered and some of these are in fact exclusionary; they prohibit specific activities in certain locations. These criteria already exist in the current regulations. Other criteria, which may be more subjective but are no less valuable or important, are also provided for in the existing permitting process.

Beyond the criteria already present in the rules, this bill arbitrarily establishes criteria that simply exclude potential hazardous waste facilities from any consideration rather than subjecting these proposals to the rigors of the permitting process you have heard described. This bill eliminates from consideration existing facilities that can likely provide safe disposition of selected hazardous wastes generated in Montana rather than evaluating the advantages and disadvantages of a proposal and reaching a rational, technically sound decision. Although not all hazardous wastes are best disposed of by incineration, many waste streams--such as painting wastes, petroleum sludges, non-chlorinated solvents/degreasers and contaminated fuels--are best disposed by incineration or energy recovery. However, no permitted facilities are located in Montana and, in fact, the closest are located several hundreds of miles from Montana.

We have also heard speculation that the reason for our opposition to this bill stems from alleged plans to utilize power plants in Billings and Colstrip, operated by the MPC Utility Division, for incineration of hazardous waste. Neither MPC nor SRM has any such plans and neither intends to develop plans that incorporate these plants into any such incineration or energy recovery system.

The answers to legitimate concerns regarding the safety of a proposed facility will be obtained by subjecting the proposal to the permitting process with meaningful public involvement, not by excluding options that may allow hazardous waste generators to comply with their regulatory obligations more cost effectively. We believe in the value of siting criteria that are technically justified and that build a framework to resolve competing demands. However, SB 338 does not establish such a framework and does not provide benefits to public health or our environment beyond those benefits afforded in the established permitting process for hazardous waste facilities.

David K. Nation, P.E.  
Vice President and General Manager



EXHIBIT 62  
DATE 3-17-93  
HB SB 338

**Western Environmental Trade Association**

**Aspen Court, 33 South Last Chance Gulch, Suite 2B  
Helena, Montana 59601  
Phone (406) 443-5541  
Fax # 443-2439**

TESTIMONY BEFORE THE  
HOUSE NATURAL RESOURCES COMMITTEE

MARCH 17, 1993

SB 338 DANGEROUS WASTE SITING ACT

Mr. Chairman, Members of the Committee, my name is Peggy Olson Trenk and I am here today representing the Western Environmental Association. We would like to go on record in opposition to SB 338, the Dangerous Waste Siting Act.

We acknowledge the right of the public to make sure that industrial activity does not adversely affect human health or ecological values. No one would argue in favor of imposing such a cost on society.

However, the dangers of too much regulation can impose just as great a cost. Rigid regulatory prescriptions discourage the creation and utilization of alternative technologies that may in fact improve public health and safety and offer more effective solutions to questions such as how to manage the waste that is a by-product of our civilized society.

Regulation should be based on sound science and sound risk analysis, and allow for more cost effective, local solutions. This legislation works in direct opposition to those goals. Proponents have not made a case as to whether these siting criteria offer more protection for public health than the permitting process established by the EPA and the Montana Department of Health and Environmental Sciences. When it comes to managing hazardous waste they don't say how, they just say no. And there are times that is not acceptable.

We, as a society, can no longer afford to put off these questions for another day. We need to be encouraging innovative solutions, not throwing up roadblocks. The real cost of this bill will be lost opportunities to utilize new technology with no resulting gains in either protecting the environment or the public.

Please encourage, or better yet demand, a thorough and conclusive permitting process. But don't let us shut the door on innovation. Please vote no on Senate Bill 338.

Thank you for the opportunity to testify.

Mr. Chairman and committee Members

I am Paul Bessler. I live at Mont.  
City in the earth's home just north of  
the school house. I consider myself  
as a conservationist. I practice what  
I preach. I spent three years in research  
before we started building our earth  
home. I am of the belief that we  
must conserve our natural resources  
as much as possible for future  
generations. Our home only takes two  
cords of wood a year to heat as compared  
to a standard stick built home of the  
same size above ground which takes  
12 to 14 cords. We now use natural gas  
and don't burn wood anymore because  
of the pollutants from wood. So you  
can say I am very concerned about  
my environment. I am happy to  
see the interest in our environment  
problems <sup>here</sup> but I am opposed to senate  
Bill 338. I believe that Mont. has had  
the foresite to adopt very good, strict  
regulations and a permit process  
second to none. To me senate bill 338  
says we don't trust the people you  
hired who wrote these regulations  
and the permitting process.

I have full confidence in this system. I live less than one mile from the Ash Grove plant, only one family lives closer. as the crow flies I live about the same distance from the plant as the Mont. city school. I work at the plant, so you could say that I am exposed to the plant 24 hrs a day and am directly involved with the process at least eight hrs. a day.

I am not concerned about any contamination coming from the plant. I am much more concerned about the gas and diesel engines going up and down the road by the school house which are polluting far more than is conceivable from the hazardous waste proposal. Every one is under the impression that they don't pollute. They better think again, all those cars add up to far more than is allowed by the permitting process.

Yes I work at the plant and I also have grand children that spend a lot of time with us. I am not about to jeopardize their safety. If during the permitting process I see something that might be out of line I will be the leader of the pack against hazardous waste



burning in my back yard, nor will  
I work in a contaminated environment.  
Life is too short for that.

This is a very emotional issue and  
I urge you to study the evidence and  
not goose the ghost.

We must recycle our waste and  
it looks to me like there is no other  
way as efficient and beneficial to the  
planet earth and as highly regulated.

Please vote no to Senate Bill 338  
and let the permit process work.

Thank you  
Paul A. Bessler

EXHIBIT 63  
DATE 3-17-93  
SB 338

TESTIMONY IN OPPOSITION TO  
SENATE BILL NO. 338

For the record, my name is Ron Drake. I reside at 75 Lincoln Road West in Helena and am a registered Montana professional engineer with over 22 years of experience and expertise in chemical process design, hazardous waste treatment, safety analysis, and risk assessment.

As a scientist and professional engineer, I <sup>am</sup> amazed and extremely disturbed that Senate Bill 338 has made it this far through the legislative process. It is a bad bill. It is dishonest, disingenuous, extremely negative, and reflects badly on the judgement and candor of this legislature. Before you toss me out on my ear, please let me explain.

Senate Bill 338 is dishonest because it purports to establish siting criteria which will protect human health and the environment. In reality the bill encourages dispersed, poorly regulated, on-site burning by less responsible and less technically and financially capable entities. Passage of the bill will almost certainly result in exposure of larger populations to greater risks and will provide them with less opportunity for recovery if damaged.

Senate Bill 338 is disingenuous because it uses irrational siting criteria to prohibit specifically targeted commercial activities for no other purpose than that of appeasing selected political constituencies. I understand that appeasing political constituencies is a valid and legitimate basis for promulgating legislation, but the resulting legislation should then not be justified with pseudo scientific nonsense. For instance, I couldn't help but notice that during the past month the Bill's proposed set-backs from dwellings and surface waters have been reduced from 5 and 4 miles respectively to 3 miles. Using a linear risk hypothesis, my extrapolation calculations indicate that the framers of this bill must now believe that the risks due to proximity to dwellings will become negligible in early May and the risks due to proximity to surface waters will become negligible in mid-June of this year.

Of course, I freely admit that my calculation is as nonsensical as the set-back provisions themselves. The point is, if this legislature believes that, as either a matter of public policy or political reality, it cannot allow existing cement plants to burn chem-fuel, then it should honestly take appropriate action and not try to disguise its motivations and justify its actions with bad science.

Senate Bill 338 is negative because it represents just another means of simply saying "No.". Montana households and industry will continue to generate so called "dangerous" wastes. At present we rely on the sufferance and good will of our neighboring states to provide us with disposal options. When our neighbors finally get

tired of us throwing our trash over the fence, we will face a waste disposal crisis. We can avert a potential waste disposal crisis by acting now to plan and provide for our future waste disposal needs. Senate Bill 338 simply says no, and provides no realistic or economically feasible alternatives for dangerous waste disposal. Once more we are sticking our heads in the sand and hoping the problem will go away. It won't.

Finally, Senate Bill 338 reflects badly on the judgement and candor of this legislature. This bill is designed to preempt and short circuit any deliberate, responsible, and thorough evaluation of the relevant scientific issues.

In the media, and during these hearings I have watched and heard laypersons and experts from both sides try and convince you with their scientific data and studies that chem-fuel burning in cement plants is either safe and efficacious or a ticking time bomb set to destroy our environment and decimate our population. Each side is providing you with carefully selected information which supports their particular agenda. What should you believe? Who is telling the truth? How can the scientific data be so conflicting?

The truth is that neither side can provide you with detailed relevant information concerning the risks associated with dangerous waste incineration at any of the currently proposed sites. Such information can only come from properly conducted safety and risk assessments which have yet to be done. Such risk assessments are normally done in conjunction with permitting and environmental assessment activities. They are site specific studies, and results are highly dependent on facility location, facility design, operating safeguards, fuel types, site geology, hydrology, meteorology, surrounding land use, demographics and many other factors. It would be an extraordinary coincidence for any two sites to exhibit the same safety and risk profiles.

Yet, by passing Senate Bill 338 this legislature will have lumped all potential incineration facilities into a single extremely high risk category which it believes can only be managed through truly draconian siting measures. By doing so, you will send a clear message to the public and scientific community that our regulatory and permitting agencies are not to be trusted and that the legislature perceives itself to be the State body most capable of evaluating complex scientific data and rendering accurate scientific judgements.

I urge you to oppose passage of Senate Bill 338.

Amendments to Senate Bill No. 338  
Third Reading Copy

For the Committee of the Whole

Prepared by Todd Everts  
March 30, 1993

1. Page 3.

Following: line 16.

Insert: "(8) "Testing" includes but is not limited to the following activities if performed by a research and development facility whose primary purpose is to test and evaluate waste treatment remediation technologies and that receives federal or state research funds to support its operations:

- (a) research and development testing; or
- (b) evaluation and demonstration of waste treatment remediation technologies."

Renumber: subsequent subsections

3-19-93

EXHIBIT

656

DATE 3-11-93

HB SB 338

Dear Representative Knox,

I would like to thank you and the members of the House Natural Resources Committee for your impartial hearing of SB 338. My husband and I are supporters of SB 338, and we feel that both sides of the issue owe you gratitude for your patience and thorough review of the bill. You have given Montanans reason to be proud of their representatives. Regardless of the outcome of your decision, your fairness has been commendable. Thank you.

Sincerely,  
Mr. & Mrs. Charles Atkins

P.S. please share our sentiments  
with your entire committee

3/17/93

Exhibit 66 is two photographs - one of I-15 (East Helena Viaduct looking south) and one of the Montana City Exit looking toward Ash Grove. The exhibit is stored at the Historical Society at 225 North Roberts Street, Helena, MT 59620-1201. The phone number is 444-2694.

T 68  
3-17-93  
B 72

Amendments to Senate Bill No. 72  
 Third Reading Copy

For the Committee of the Whole

Prepared by Michael S. Kakuk  
 March 26, 1993

Lines 11 through 14.

;" on line 11

"ENDING" on line 11 through "MONTANA" on line 14

REQUIRING A PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT  
 OF WEATHER MODIFICATION PROGRAM"

Lines 19 through 25.

Section 3 in its entirety

NEW SECTION. Section 3. Programmatic environmental

ment. The board may not issue a permit under 85-3-  
 department has prepared a programmatic  
 impact statement on activities under Title 85,  
 provided for under 75-1-201 and rules adopted  
 5-1-201. The programmatic environmental impact  
 must be completed by November 1, 1994."

he nuclear-  
 ical agents  
 er iodide is  
 % of all  
 cause of the  
 applicability  
 in altering  
 Anyone who  
 d plane can  
 sud seeding  
 it of as little  
 s to hold the  
 gnated with  
 res—are the  
 up a practi-  
 known that  
 even bother  
 ncrimination  
 n from the

r iodide does  
 necessitate a  
 tural precipi-  
 be generally  
 depends on  
 fficient mois-  
 l the presence  
 se nuclei may  
 s, and their  
 : rain-making  
 ner thunder-  
 nuclei in the  
 the top of the  
 e moisture in  
 for these ice  
 condenses on  
 condensation  
 drop of rain  
 size and then  
 e by gravity.  
 s the introduc-  
 al nuclei, silver  
 thunderstorm  
 ystals and ice  
 racteristics. As  
 the cloud will  
 r iodide crystal  
 see page 6

**RAIN MAKING FRAUD**  
 Cloud seeders say: "We increased all by 14%." This sounds good figures are analyzed. Cloud seeding takes place before the clouds begin to rain. In the process of seeding, a few drops of rain fall. When this precipitation drops after seeding, the cloud seeder tries to pawn off as one of rain making. If no seeding taken place, all of the potential rain would have fallen. This represents 100% but only fell. It can conclusively be stated cloud seeding decreases rainfall by

**SEEDING TECHNIQUES**  
 Under-seeding may make cloud rain now, but at the expense of farms towns downwind. Over-seeding does several things. Depending partly on the materials and technique used, and the size of the cloud. Over-seeding with silver iodide may break the cloud to rain or snow slightly, in 10 to 30 minutes. Depending on size of the cloud and the silver iodide dosage, it will not rain for 10 miles or 50 to 150 miles, but meanwhile unexpected energy builds up and eventually the rain comes down as a subburst on a distant city. Dry ice and silver iodide will make clouds freeze up, that is, "glaciate" and hang motionless in the sky for a number of hours. Sometimes the clouds build up enormously, but it will not rain.

**THUNDERSTORMS**  
 Nearly 4,000 thunderstorms have been lashing the earth 24 hours a day, year in and year out, through all of time since the world began. Without these storms, there would be no life on earth. There would be no moisture of the air between layers. Pollution from dust, smoke and other foreign matter would increase to the point of causing death. Lightning is the world's greatest producer of nitrogen compounds, the vital soil ingredient without which most plant life could not exist. This is the only source of nitrogen for the forests which cannot grow without it. Notice that trees and plants in seeded areas look droopy, tired, and in many places entire kill is noted. Scarlet oak is one variety that died. This nitrogen breaks down easily in soil and water and causes no problems. Weather modification people have changed into spraying and shooting the clouds to control lightning without once studying the contributions that lightning makes to the earth. Nowhere in all the pseudo-scientific literature is there mention of the value of lightning strokes to man.

**HURRICANES**  
 Project Storm Fury, conducted by the U.S.A. and the U.S. Navy, has kept hurricanes from coming up the eastern seaboard for nearly ten years. These massive storms are necessary for man's survival. They bring 30% of the moisture to this area—moisture that is desperately necessary to grow food. Even more important, it is necessary for this type of system to disperse the high temperatures found near the equator. Hurricanes travel towards the north pole, and this eventually tends to equalize high temperature variation. If hurricanes are not allowed to go their full life cycle, nature will find some other way to maintain heat balance. And this new method undoubtedly will be more disastrous than the hurricane. These systems also help tremendously in eliminating air pollution problems that are so serious on the east coast. Hurricane Camille, the most

transverse the east coast was without question due to the blunderings of inept science. Inquiries indicate Camille was seeded over water, and factual visible evidence of seeding was indeed observed as she passed over land. What happened in this situation is a cloud seeding experiment getting out of hand. It represents a situation where reversible or cascading effects on atmospheric processes take place. The people who died from this hurricane were killed by scientific blunderers. Hurricanes must be allowed to run their natural course since they are the good fairy for the northeast, and are one of the great water wheels in nature's water cycle.

**MYSTERIOUS PROGRAM**  
 A massive program of cloud seeding—apparently entirely outside of the official federal programs on weather modification—funded from unknown federal sources, has been going on spasmodically since 1954, and steadily since 1962. This program has resulted in severe-to-extreme drought in virtually every area where conducted.

The Appalachian Mountains should guarantee the Atlantic coastal plains a healthy quota of rain each summer. No drought showed in the weather statistics with the single exception of 1930, which emphasizes statistically that present droughts are man-made. Senatorial and departmental sources state that the U.S. Army was cloud seeding behind military secrecy in Pennsylvania counties in 1962-1966 and in Tennessee in 1964-1966.

Since the seeding in Pennsylvania took place during the months of growth of June, July and August, the principal effect was aimed at the farmer to drive him off the land. The areas of severe drought coincide exactly with the areas the federal government plans to devote to population and light industry. With a few, limited exceptions, the farmer is to be eliminated. The same plan applies on the Pacific coast.

Federal agencies with giant land-acquisition programs want farmers and rural people put into a depressed economic state so that they are willing to accept any price for their lands for parks and reservoirs. For verification, send for the Jury Trial Hearings, 1968, before the U.S. House of Representatives Public Works Committee. Washington, D.C. and read what happened in Tennessee.

**POTOMAC RIVER BASIN**  
 The Potomac River Basin or Mid-Potomac includes the states of Maryland, Virginia, West Virginia and South Central Pennsylvania. This area also encompasses a large fruit growing belt. A number of fruit producers of this section engineered their orchards for irrigation. Then with prodding from the Insurance Company of North America, they organized a Weather Modification Corporation, and hired a cloud seeding firm to destroy the rain storms. The desire of the fruit growers was to eliminate competition from the other growers who could not irrigate. The insurance company's interest was pocket padding by not having to pay storm damages that might occur.

A state of war finally developed in the four-state area between the fruit growers and the rest of the population. Finally the fruit growers formally deactivated, but merely took their seeding activities into underground organization. They continued to carry out cloud seeding more intensely than ever, trying to eliminate all agriculture in the area, and to retaliate against those who thought law and order was part of our democratic society.

The federal government, thinking the fruit growers would abide by their commitments, began their own program of weather tampering in the

## It's No Ordinary Fish Story!

2135



**CARPOLE'S ECO-GRO, — 8-4-4** Liquid Fish Fertilizer blended with seaweed works.

ECO-GRO provides nourishment for soil bacteria, release and availability of plant nutrients.

ECO-GRO helps plants resist damage by insects and plant diseases.

ECO-GRO is a chelating agent holding essential nutrients for the plants timely use.

ECO-GRO, 8-4-4, because it is a Fish-Seaweed blend, contains all the minerals biologically active on our planet.

Contact **CARPOLE'S, INC.** today.

Box 32, Garfield, Minnesota 56332  
 Phone 612-834-2211



## PERMA-GUARD®

### FOSSIL SHELL FLOUR

COMPOSTED OF GROUND DIATOMACEOUS EARTH  
 (FRESH WATER TYPE)

#### CONTAINS:

Silicon Dioxide from Diatomite 70%  
 Trace Minerals & Inert Ingredients 30%

**SUGGESTED FEEDING RATES:** The manufacturers of Fossil Shell Flour recommend that the product be fed on a free choice basis, or, when that is impractical, that it be fed at the rate of 1% of the dry weight of the total diet of mammals or 2% of the dry weight of the total diet of all kinds of fowl.

MANUFACTURED AND SOLD BY

**BOWER INDUSTRIES, INC.**

**PERMA-GUARD DIVISION**

Philip A. Wheeler, Dist.  
 Rt. 1, Box 218  
 Vestaburg, Michigan 48891

Herb Wood, Dist.  
 Box 459B, R.R. 1  
 Desoto, Kansas 66018  
 913-441-3366

Zack & Ranch, Inc.  
 RFD 1  
 Gap, Pennsylvania 17527  
 717-442-4171

Whitbeck Distributing  
 11451 Whiteoak Ave.  
 Granada Hills, California 91344  
 213-360-6118

B & R Organic Products  
 P.O. Box 21024  
 Phoenix, Arizona 85036  
 602-276-5551

Nelone Cherry, Dist.  
 Rt. 2, P.O. Box 49  
 Castleberry, Alabama 36432  
 205-966-3203

John Mullin Nursery  
 11751 Doylestown Pike  
 Quakertown, Pennsylvania 18951  
 215-536-4068

**JERSEY BRAND PRODUCTS LTD**

2875 LAURIER ST. EAST MONTREAL, QUEBEC, CANADA  
 P.O. BOX 21024 PHOENIX, ARIZONA

JUNE 1977



## WIS. BIOLOGICAL

## AG. SERVICE

Specializing in Natural Soil Building  
Materials and Soil Restoration.

Soil Analysis and Soil Management  
Services also available.

DALE BURDICK

Telephone: 715-837-1891

Box 177 Hillsdale, Wisconsin 54744

BX is a complete 100%  
organic fertilization program  
at \$25.00 per acre/unit  
Equal to any NPK application.

YOLO MICROBION CO.  
P. O. Box 1574  
Woodland, CA. 95695

# GENESIS II

THE NEW BEGINNING  
FOR AMERICAN FARMERS

LOW  
COST

NATURAL  
NITROGEN  
FIXATION

ENVIRONMENTALLY  
SAFE

MADE BY GENESIS II, P. O. BOX 11, APRIL, TEXAS

## HOP

Humus Organic  
Products

We help to train new dealers who believe in a  
complete Eco cells program.

Donald C. Wilms

Rt. 3, Box 135, Hutchinson, Kansas 67501  
Phone 316-663-2488



BIO PROCESS COMPANY

We have been here for custom production of  
microbes produce by submerged fermentation  
for feed additive or other agriculture uses.  
Arrangements enter into or contract programs.  
Choose organisms from our culture collection or  
your own specific organism. All work on a  
confidential basis for your label.

ALPHA BIOPROCESS COMPANY

Division of  
AQUATERRA BIOCHEMICALS, INC.  
P.O. Box 42350  
Houston, Texas 77042 713-785-0642

## HUMATES

Rocky Mountain Humates  
P. O. Box 1754  
Gallup, New Mexico, 87301

PH: 505-268-5330

## AGRISERUM

A nospontaneous gel plasma used on  
seeds and plants to feed the bacteria  
in the soil. Results: Crops and feed  
of healthier, tastier and higher nutri-  
tional value.

Farmers PHONE 618-377-6237  
Manufacturing, Inc.  
DORSKY, ILLINOIS 62021

ORGANIC SOIL TESTING  
AND CONSULTING  
GARDEN — FARM — LAWN

Complete line of organic products available  
by mail. Sher Gro fertilizers, Permaguard-  
local shell products, dormant oil soothers,  
B.T.S., leaf sprays, tangleroot, glacial  
gravel. Clients accepted in Great Lakes  
area for organic conversions. Orchards,  
berries, vegetables, and field crops.

NATURE'S WAY FARM

CERTIFIED ORGANIC GROWERS  
Route 1, Box 218, Vestalburg, MI 48081  
Phone (517) 268-5541

you  
can order  
acres. USA  
by the bag!

For \$8.00 more (includes shipping to and  
returning the product) \$20.00 of our money  
for your money (cash and right money)  
guaranteed or money back returned.  
Unlimited quantity of this money. For  
more information, contact: 1-800-451-1234

## SUPERIOR GRADE HUMATE SOURCE

70% HUMIC ACIDS FROM NORTH DAKOTA LEONARDITE

AVAILABLE IN 50 lb. BAGS AND BULK

TRUCKLOAD AND CARLOAD SHIPMENTS

## AMERICAN COLLOID COMPANY

5100 Safford Court, Skokie, Illinois 60076

For additional information contact 312/966-5720

Robert Acord

Mike Relerson

# THE RAIN- MAKING MYTH

from previous page

11. Cancer is virulently out of  
proportion.

12. Financial losses to agriculture  
and related industries run into the  
billions.

13. Forest trees as well as cultivated  
orchards are dying from chemical  
reactions taking place in the air due to  
the addition of cloud seeding agents.

14. The atmosphere has been  
rendered completely biologically in-  
compatible with all living matter, which  
includes animals, plants and humans.

## WHO IS IN FAVOR

Cloud seeding success is determined  
by its acceptance by the general public.  
Here is where we put the chips on the  
table. Under no circumstances has  
there been one report of anyone  
favoring this new activity without greed  
as a goal. Congressional hearing,  
private studies, newspaper articles,  
etc., all ask the same request: please  
stop cloud seeding. The reasoning is  
quite simple, because seeding is grand  
larceny and international robbery.

A problem analysis sponsored by  
U.S. Department of Interior, Bureau of  
Reclamation, Office of Atmospheric  
Resources, May 1969 can be quoted as  
follows: "Fog dispersal agents may have  
detrimental effects on plants and  
animals over a long period. As a matter  
of public policy, aerial distribution of  
unknown proprietary compounds  
should not be allowed on any but a  
strictly experimental basis, even if tests  
convince health agencies that the  
materials pose no immediate threat to  
human welfare. Full disclosure of the  
composition of any such material added  
to the environment is necessary in order  
that the scientific community as a whole  
may evaluate the possible long term  
effects."

## HAVOC

Unless cloud seeding is brought  
under control, total disaster lies ahead.  
This is the statement of a distinguished  
scientist, Gordon J.F. MacDonald,  
writing in *How to Wreck the Environ-  
ment: Geophysical Warfare, in Unless  
Peace Comes*. Massive and repeated  
attacks on natural weather coincide  
with a dislocation of the atmosphere so  
grievous that the world's weather is  
"going crazy." And this "crazy weather"  
has played a major role in food  
shortages.

In one specific instance, typical of  
the rest, "eight tons" of nucleating  
chemical—seeding agents—were seed-  
ed over the Punjab, India, July 16 to  
September 18, 1954. In this case, as in  
the Rapid City disaster, the hygroscopic,  
common salt, was used. Salt  
expands enormously in these experi-  
ments, more so than the poison  
commonly used, silver iodide. Salt and  
soapstone were the seeding agents used  
over the Indian sub-continent. Result?  
Disastrous floods.

## BEER VS. FOOD

On March 5 and 6, 1973, hearings  
were held at Alamosa, Colorado, on the  
petition of Atmosperics, Inc., of Cali-  
fornia, to seed the San Luis Valley for  
Coors Brewing Company and Valley

Growers, Inc. The purpose: suppress  
hail and "increase" rain. The evidence  
that the suppression of hail means  
suppression of rain as well, and  
therefore drought follows, was so clear  
that the petition was denied. Thus the  
85% of area population who were on  
record as against seeding were given  
respite from a disastrous man-induced  
drought.

The testimony of Charles B. Moore,  
Professor of Atmospheric Physics, New  
Mexico School of Technology, Socorro,  
New Mexico, was crucial. Seeding is no  
way to modify the weather, he said. The  
amount of poisonous silver iodide used  
is "appalling" in its effects. If modifi-  
cation is desired, electrical charges  
should be used, following nature.  
Intense rainfall follows after lightning.  
Lightning is the best "rain-maker"  
there is.

The amount of seeding proposed for  
this valley would be a catastrophe, he  
said. Also, the "rainfall" shown on  
radar as tiny droplets would be  
recorded as precipitation. In fact, the  
dry air evaporates such drops, and none  
reach the ground. In addition, rain  
cannot be "made." Seeding decreases  
rainfall well beyond the target area. So,  
seeding the Tucson, Arizona target  
area, results in an apparent 49% loss of  
rainfall. Down wind, in Walnut Gulch,  
there was also significant decrease in  
rainfall. Moore agreed with the distin-  
guished hydrologist, Dr. H.B. Osborn,  
that seeding accounts for a 34% loss of  
rainfall. It can never, said Moore, be  
predicted that the seeding chemicals  
will remain in the target area. It also  
appeared in the testimony that whoever  
reads and reports the rain gauge record  
controls the data. Such a person's  
honesty controls the record.

A recent report from the San Luis  
Valley states that the Valley Growers,  
Inc., are growing more barley than ever  
are paid more for it, to not have to store  
it, and have not had to pay out  
\$100,000, the fee for cloud seeding.  
Tom Henderson of Fresno, California,  
was applying for a permit to seed the  
Valley for the growers by demand from  
Coors! He fraudulently applied on the  
basis of rain-making, although Coors  
admitted, under oath, that drought was  
the desired result.

## SCREWBALL WEATHER

The intricate complexities and un-  
known dangers, especially of irrevers-  
ible changes involved in cloud seeding,  
demand carefully monitored local,  
small-scale operations. To date, this  
mandate remains unheeded.

That this is no idle threat is revealed  
by the fact that "silver iodide is toxic  
and must be handled with care." Ya  
tons of this poison are dumped over the  
country in a decade, as Charles Hosler,  
Penn State Meteorologist, admits in his  
pamphlet, *Why is it Dry?* The distin-  
guished cloud seeder, Irving P. Krick  
notes that "The Government will be  
putting out thousands of pounds of  
seeding material, and we put out  
one-fifth of an ounce per hour. That  
shows how little you have to use. . . . The  
Government thinks it can do more by  
using more." Krick calls such jobs  
"screwball situations." In spite of  
dangers, known and unknown, "It is  
highly unlikely that seeding with silver  
iodide will be abandoned." Charles B.  
Moore, Professor of Atmospheric  
Physics, New Mexico School of Tech-  
nology, says that no one really knows  
how long seeding chemicals stay  
around, and that the amount used is  
"appalling."

One of the worst droughts, that of  
the entire region of sub-Sahara, a  
catastrophe unprecedented, lasting  
seven years, coincides with intensive  
seeding in Kenya for the Tea Industry.  
Seeding chemicals are effective for  
many hours, and hundreds of miles: the  
trade winds, easterlies (flow east to

FOR SALE: Alfalfa seed for sprouting  
organically grown — Ed Wessling, New  
Smethport, Kansas 67470.

**WANTED:** Corn, millet, sunflower seeds, beans, peanuts, honey, sorghum, herbs and other natural foods. We buy in quantity with preference given to organically grown foods. Ozard Co-operative Warehouse, P O Box 30, 401 Watson, Fayetteville, Arkansas 72701. 501-521-4920

PURE VT. MAPLE SYRUP. 1977 Crop  
Gallons—\$20.00 Quarts—\$5.50 Pints—  
\$3.75 p.p.—Sweet Farm, Prickly Mtn.,  
Warren, VT 05674.

Get back to natural soil aeration and fertilization by using earthworms and earthworm castings for your farm, garden spot, compost pile or household plants. Worms produce the finest fertilizer available to man. Castings. Orders include instructions on application and results. Sterilized castings 25 cents per lb., C.O.D., Earthworms—\$5.50 per 1000. Vermi Culturalist Trade Assn. 225 N. State, Salt Lake City, Utah 84114, with offices in sixteen states.

**BUY HERBS WHOLESALe!** Tablets, capsules, bulk teas. For personal use or resale. Free wholesale catalog. The World's Finest—from Nature to you. Old Fashioned Herb Company, (established 1933). P O Box 799-A, Provo, Utah 84601.

**SPIRITUAL FOOD**—"Man lives not by bread alone." New Testament, KJV. 16 Cassettes with Album, 100% lifetime guarantee. Read by Alexander Scourby. Send check or money order for only \$26.95. 30 day money back offer — J&C Truth Tapes, Rt. 2, Box 150B, Vinton, Virginia 24279.

ROBERT FAUST: What a new Agricultural Ball Game we've got going! I want you on our team. —Colonel Taylor, PH (505)345-2441

**PURE WATER**—The World's First High Speed Super Compact Distiller—15 gallons per day, lifetime guarantee. Free information—SASE appreciated—J&C Water Works, P.O. Box 350B, Vinton, Virginia 24179.

**POST YOUR PROPERTY WITH THIS "DO NOT SPRAY" sign** A very heavy 8X10 adhesive backed vinyl bold sign. Use at boundaries, right of ways, orchards, bee yards, gardens. Each \$2.50, 6/\$10.00, 12/\$18.00, 24/\$30.00, 100/\$100.00. Cash paid OMNICO, Box 3, Macomb, Ill. 61455

**LIFE-TIME BIO-RHYTHM**—First charting of physical, mental, emotional status free. You bring up to date weekly or daily—for life. Charts and graphs included. Very simple. 3 minutes to extend for a week. \$1.00 only, to Persuations, Box 19356, Denver, Colorado 80219. Money back offer. Need only your birth date.

**VITA MIX**—The Great Bread Maker and Total Juicer. Special price \$189.95 with this ad. Write for brochure or order from R.S. Davis, 9869 M78, Haslett, Michigan 48840. Check with order saves freight and tax.

**OFFENDED? EARS HURT?**—From blaring, distasteful TV commercials? Simple instructions for an inexpensive remote volume control. Electronic, or manual mechanical. \$1.00 state which. Both \$1.50.—Persuasions, Box 19356 Denver, Colorado 80219.

BACK ISSUES AVAILABLE: 1977—Feb.  
March, April—60 cents each

**DEALERS WANTED.** Sell the very best! **MAGIC MILL**, all-grain stone mill, and **BOSCH MAGIC MIXER**, "the complete kitchen machine." Every housewife can have oven ready bread from whole grain in 15 minutes and serve complete nutritious meals. Can work from your home—good income. **WHEATLAND MAGIC MILL CENTER**, 415 West 13th Street, Wichita, Kansas 67203. (316) 267-8828

**"A FARMERS GUIDE For FUEL INDEPENDENCE"** by Leslie Grove, internationally known and respected engineer, inventor, consultant. Simple do it yourself plans. Methane gas for home, liquid methal fuel for tractors. Pyrolysis method using partially dried manure, hay-green or dry, sawdust, woodchips, decayed trees, old boards, garbage lignite, peat. \$10.00. Order from Neward Peterson, Box 7A, Benson, Minnesota 56215.

**WANTED**—Couple desiring to live in a beautiful non-polluted area and willing to milk and care for one or two cows Thermal baths available — Rt. 1, Box 675, Hot Springs, Arkansas 71901

**LINE BUSTER RECIPES:** Guaranteed Seven Secret Bait Recipes. Catch Carp, Cat, Turtle, Game Fish, 30 pound test; lines broken Ten years to perfect. Catch limit or money back \$2.00 for 7 recipes — John Hammond, R.R. 5, Feislar Road, Covington, Kentucky 41015.

**SHAKLEE ORGANIC PRODUCTS**—Natural food supplements, vitamins, biodegradable household products, cosmetics. Money back guarantee. Fantastic income and bonuses. Free catalog. Write—**ERNIE FORDOS**, 4780 N. Merrill Road, Merrill, Michigan, 48637.

**HERBS FROM AROUND THE WORLD.**  
Natural Raw Powder in gelatin capsules.  
Finest quality money can buy. Write for free  
price list Retail - Wholesale Dealerships  
available. HERBS, c/o 6858 Hazeltine, #6,  
Van Nuys, California 91405.

**COMFREY ROOT CUTTINGS.** Certified organic by Organic Growers of Michigan. 10 for \$4., 25 for \$7., 50 for \$9., 100 for \$14. Mid-West Comfrey Growers, P.O. Box 176, Pittsford, Michigan 49271.

**SELL NEO-LIFE PRODUCTS** — Dehydrated Foods, Natural Food Supplements, Chelated Vitamins & Minerals, Gloda Cosmetics, Bio-Catalytic-Non Toxic Cleaners. Invest only \$15.00-Extra Bonuses. Ph: 815-369-2260. **Stauffert's Dist. Co., Box 36, Waddams Grove, Illinois 61048.**

**GOLF**—Playing 9 holes on the driving range. Proper use can knock six strokes off your game in three sessions. Simple instructions and unique score card can be duplicated. \$1.00 to KR Publishing Company, Box 19356, Denver, Colorado 80219

**FIVE WORDS TO PEACE OF MIND—FREE—**  
with self addressed stamped envelope to  
Lamb, 3950 West Walsh, Denver, Colorado,  
80219

**CONTOURED PUTTING GREEN.**—Indoors or out. Change contours as wished Under ten dollars. Only \$1.00 for complete details of materials, contouring, mechanical cup, simple instructions, illustrated w/photo. \$1.00. KRI Publishing Company, Box 19356, Denver, Colorado 80219.

**Fifteen cents per word;  
\$5.00 minimum  
Payable with insertion order.**

west), carried these agents of death over that fragile ecology. The drought killed countless thousands, and ruined the economy of the nations. The tea crop has never been better. Small wonder Maurice Strong, head of the U.N. Environmental Program, warns that theft of rain could lead to world battle. Time is running out.

It is fairly well known that midwest drought coincides with the annual and massive cloud seeding programs in the Rocky Mountain States. Not so well known is the fact that after any huge seeding program, or even a modest one, the chemicals that are not used up will move clear around the globe and trigger effects that are completely unpredictable. Flood and drought are the inevitable companions of weather modification. Severe droughts are causing not only severe global food shortages from crop failure. The slightest change of a degree or two in ocean temperature off the coast of Peru started a chain reaction that practically wiped out commercial fishing there.

The enclosed "Letter to the Editor," printed in a local newspaper in South Dakota, summarizes the rain-making in that state. Most areas were 7 to 8 inches short in rainfall during the growing season since cloud seeding started.

*Being a farmer-rancher on the north Buffalo County line, I have watched weather modification for several years. We got more rain than they did under their modification program until the plane started to fly farther north. Many times I have seen what looked like a rain cloud coming, until the plane went through it, and then the cloud would promptly disappear. They also had several bad hailstorms go through Buffalo County during their modification program.*

If modification would produce one-to-two inches more rainfall, I suppose we might have a chance to win ten-to-one, but what if we lose one or two inches of rainfall or more? It looks to me like another smooth-talker has made suckers of us.

Last year we had the driest spell I've seen for a long time, from June 4 until August 18 we had about three-quarters of an inch of rain in small showers, not enough to help much. We had clouds that looked good but the rainmakers flew through and took care of them.

The rainmakers quit August 15, and on the 18th we got a half-inch of rain. About the 30th we had three inches and a rather wet fall from there on out. This, of course, could be coincidence or just plain South Dakota. But I think we should save millions of dollars a year to help the drought stricken, because even with the Chamber of Commerce, counties and state financing this modification program, under South Dakota's present economy agriculture will finance at least 50 % of it.

The Rapid City, South Dakota, disaster of June 9, 1972, was an unprecedented flood which cost 250 lives and destroyed \$100 million worth of property. Intensive research by Environmental Action of Washington, D.C. (see issue for May 12, 1973) shows that the five years of seeding storm

clouds with salt apparently turned them into four huge rain generators held stationary over the victimized area for hours. So great was this man-induced deluge that the record shows "more than ten times the flow of any previous flood or record" for that area. The article suggests that the steadfast denials of responsibility by the seeders South Dakota School of Mines, Institute of Atmospheric Sciences, the federal Interior Department commercial seeders comes from their "determination to convert our skies into their own experimental laboratories." This results of course in "their self-serving twisting of facts and conclusions," which smacks "of nothing less than a meteorological Watergate." Thus the conclusion of Britain's leading meteorologist, Dr. Brian J. Mason—"The last 20 years of effort in cloud seeding have been a waste" (*Science News*, "Earth Sciences," volume 97)—is the understatement of the decade. The Stockholm Conference on the Ecology of 1973 concluded that the three greatest dangers to the survival of man are SST, the dredging of rivers, and at the top of the list: *weather modification*.

It is recognized the United States must continue with weather modification research to find out what should be controlled and what should be left to nature, and how to protect the country militarily. However, the cloud seeding community have been too indifferent of the people's welfare, both health and economic, and too careless of their responsibility to take scientific precautions to protect the people, the economy, the ecology, and the global atmosphere against adverse effects of weather modification.

Therefore, Congress should establish a federal regulatory body that regulates the traffic but does not manage the scientific activity. In fact, the Commission should be expressly forbidden to engage in any aspects of management. The chairman and half of the commission members should represent the public interest in view of the overwhelming concern, interest and investment in the geographical area as compared to the cloud seeder's slight financial and emotional interest.

An advisory body composed of scientists of every discipline should be maintained on a permanent status as a "watch-dog" over cloud seeding activities. They should be required to look for possible damage to the economy, the public health, the ecology, the global physics and to search for international methods and practical methods to insure against foreign control of the nation's weather.

This is a large federal employment project, but the damage is far more serious. To restore the citizens' confidence in the federal and state governments, every cloud seeder should be required to register with the Federal Commission and to pay the costs to the Federal Commission of advising the County Commissioners of every county affected, of the project, of its nature and its duration and of inserting a public notice in one newspaper in each county. Cloud seeding in any agricultural area should not be permitted more than one-fifth period of time of the total growing season, as the possibility of increasing rain appears dim at this time. An environmental impact statement with substance should be required.

The Tri-State Natural Weather Association has requested the President of the United States announce a ban on cloud seeding on or over the Appalachian Mountains and the Atlantic Coastal Plain for three years or until a federal regulatory commission is established, this to permit the economy to recover.

NOV 20 '92

ND ATMOSPHERIC  
RESOURCE BOARD  
NATIONAL WEATHER SERVICE  
ROOM 212, ADMIN. BUILDING  
LOGAN INTERNATIONAL ARPT.  
BILLINGS, MT 59105

NOVEMBER 17 1992

BRUCE BOE, DIRECTOR  
NORTH DAKOTA ATMOSPHERIC RESOURCE BOARD  
900 EAST BOULEVARD  
BISMARCK, NORTH DAKOTA 58505-0850

SUBJECT: LETTER OF APPRECIATION FOR RADAR DATA PROVIDED  
BY NORTH DAKOTA RADAR NETWORK AT BOWMAN, ND.

Dear Mr. Boe,

One of the primary missions of the National Weather Service is to reduce the risk from life/injury threatening weather events.

We are constantly trying to upgrade the quality of service provided to people in our area of responsibility. During the past severe weather season, your radar office at Bowman helped us to improve our services to people in Southeast Montana.

While the summer of 1992 was relatively quiet in terms of severe weather for Southeast Montana, the Bowman office still was able to provide much needed accurate radar information to our office.

Our staff appreciated the cooperation and information given by the Bowman staff. On behalf of Mr. Bert Nelson, MIC and his staff; please convey our "thanks" to Darin Langerud and Rory Mitchell for their assistance this past season.

Sincerely yours,

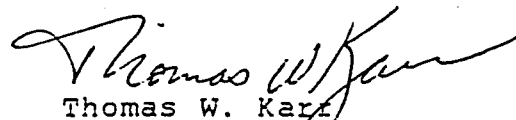
  
Thomas W. Karr  
Disaster Preparedness  
Program Leader

EXHIBIT 68  
DATE 3-17-93  
SB 72



CCC-441A  
(09-15-88)

1988 DISASTER PROGRAM WORKSHEET

USDA-CCC

FARM NO.

# 371

Crops and Participation Status →

1. BASIC RATE

YIELD	IR	WHE	Barley	EXHIBIT	70
	NI	1.22	2.516	DATE	3-17-93

ACRES	IR	123.9	24.4	HB	SB 72
	NI				

4. EXTENSION (Item 2 x Item 3)	IR				
	NI				

Farm Expected Production (TOTAL EXTENSION IRRIGATED AND NON-IRRIGATED)		2726	732		
		2726	732		

6. Disaster Level (Item 5 x .65)		1772	476		
----------------------------------	--	------	-----	--	--

Actual production (from ASCS-658)		0	0		
-----------------------------------	--	---	---	--	--

8. Loss for Payment (Item 6 - 7)		1772	476		
----------------------------------	--	------	-----	--	--

Maximum Low Rate Loss (Item 5 x .4)		1090	293		
-------------------------------------	--	------	-----	--	--

10. A. Low Rate Loss (Smaller of Items 8 and 9)		1090	293		
---	--	------	-----	--	--

B. Rate (.65 x Basic Rate)		2.75	1.63		
----------------------------	--	------	------	--	--

C. Low Rate Payment (Item 10A x 10B)		2998	478		
--------------------------------------	--	------	-----	--	--

A. High Rate Loss (Item 8 - Item 10)		682	183		
--------------------------------------	--	-----	-----	--	--

B. Rate (.9 x Basic Rate)		3.81	2.26		
---------------------------	--	------	------	--	--

C. High Rate Payment (Item 11A x 11B)		2598	414		
---------------------------------------	--	------	-----	--	--

2. TOTAL FARM PAYMENT (Item 10C + 11C)	Report (5592)	5596	892	Report (891)	
--	---------------	------	-----	--------------	--

13. Farm Expected Gross (Item 5 x Basic Rate) (Whole dollars)		11,531	1,837		
---	--	--------	-------	--	--

PRODUCER PAYMENTS

Name of Producer					
------------------	--	--	--	--	--

14. SHARE (from CCC-441)					
--------------------------	--	--	--	--	--

Gross Disaster Payment (Item 12 x Item 14)					
--	--	--	--	--	--

16. Net Insurance Indemnity (from CCC-440)					
--	--	--	--	--	--

Sum (Item 15 + 16)					
--------------------	--	--	--	--	--

18. Expected Gross (Item 13 x Item 14)					
--	--	--	--	--	--

Reduction (Item 17 - Item 18) (Enter 0 if negative)					
---	--	--	--	--	--

20. Net Disaster Payment (Item 15 - Item 19)					
--	--	--	--	--	--

Payment reduced for nonparticipating farms (Item 20 x Permitted Acreage Factor)					
--	--	--	--	--	--

Name of Producer					
------------------	--	--	--	--	--

1. SHARE (from CCC-441)					
-------------------------	--	--	--	--	--

Gross Disaster Payment (Item 12 x Item 14)					
--	--	--	--	--	--

16. Net Insurance Indemnity (from CCC-440)					
--	--	--	--	--	--

Sum (Item 15 + 16)					
--------------------	--	--	--	--	--

18. Expected Gross (Item 13 x Item 14)					
--	--	--	--	--	--

Reduction (Item 17 - Item 18) (Enter 0 if negative)					
---	--	--	--	--	--

20. Net Disaster Payment (Item 15 - Item 19)					
--	--	--	--	--	--

Payment reduced for nonparticipating farms (Item 20 x Permitted Acreage Factor)					
--	--	--	--	--	--



RAIN AND HAIL INSURANCE SERVICE, INC.  
MULTIPLE PERIL CROP INSURANCE PROOF OF LOSS  
CIGNA PROPERTY AND CASUALTY INSURANCE COMPANY

INSURED INFORMATION

TIMOTHY J. KLASNA  
END ROUTE  
LANBERT, MT 59243

PHONE TAX I.D.  
406/774-3416 516-74-2627

AGENCY INFORMATION

TOWN & COUNTRY INSURANCE INC. EXHIBIT 70  
P.O. BOX 28 DATE 3-17-93  
GLENVIEW, MT 59330  
PHONE CODE 1458-05  
406/365-2322

STATE  
MONTANA

COUNTY  
RICHLAND

LOSS PAYABLE TO INSURED AND:

LOCATION				A CROP		B PRACTICE				C TYPE		DETERMINATION OF AMOUNT PAYABLE											
POLICY LINE NUMBER	D UNIT NO.	E SEC. TION	F TWP N/S	G RANGE E/W	H ASCS#	I RISK AREA	J PR. CODE	K DATE	L SECONDARY CODE	M HARVESTED PRODUCTION	SUGAR %	O STAGE	P ACRES	Q STAGE GUAR. PER A.	R ADJUSTED OR STAGE UNIT GUARANTEE	S REPLANT REDUCTION	T PRODUCTION TO BE COUNTED	U DEFICIENCY FOR FARM UNIT (R-S-T)	V PRICE	W UNIT INDEMNITY	X INTEREST	Z AMOUNT PAYABLE (W X X)	
1 1.0	2.01	27	23N	54E	371	WHEAT	R6	11 89		684	10.2	H	84.90	15.000	974.00		684	290	3.0000	870	.653	583	
2 2.0	2.02	28	23N	54E	371	WHEAT	R6	11 89		944		H	89.10	14.300	1274.00		944	330	3.0000	990	.657	624	
3 11.0	3.01	2	24N	53E	1158	WHEAT	R6	11 89		1399		H	104.40	15.000	1566.00		1399	167	3.0000	501	.300	150	
4 9.0	3.02	34	25N	53E	1158	WHEAT	R6	11 89		504		H	55.80	12.800	714.00		504	210	3.0000	630	.300	180	
5 3.0	3.02	34	25N	53E	1158	WHEAT	R8	11 89		1532		H	93.60	18.800	1760.00		1532	228	3.0000	684	.300	205	
6 13.0	3.03	18	24N	54E	1158	WHEAT	R8	11 89		1491		H	133.20	18.800	2561.00		1491	1070	3.0000	3210	.300	966	
8.0	3.04	10	24N	53E	1158	WHEAT	R6	11 89		2506		H	133.7	18.000	2407.00		2506	799	3.0000	0	.300	NI	
12.0	3.04	10	24N	54E	1158	WHEAT	R8	11 89		2414		H	142.3	18.800	2485.00		2414	71	3.0000	213	.300	186	
10.0	3.05	35	25N	53E	1158	WHEAT	R8	11 89		1109		H	103.10	18.800	1882.00		1109	773	3.0000	2319	.300	690	

I accept the Agreed Amount Payable, subject to policy provisions, for damage to my insured crops. I declare that the facts stated are true, and I understand that this PROOF OF LOSS and supporting papers are subject to audit and approval by the Company.

I understand that this crop insurance is subsidized and reinsured by the Federal Crop Insurance Corporation, an agency of the United States and that I may be prosecuted under applicable provisions of the Criminal Code of the United States for knowingly or willfully making false statements or filing false reports, and if convicted may be fined up to \$5,000.00 or imprisoned up to two (2) years, or both, pursuant to 18 U.S.C. 1014, or other applicable provisions of the Criminal Code of the United States.

NO LOSS PAYABLE		SIGNATURE OF INSURED		DATE	
CROP	UNIT	X	<i>Timothy J. Klasna</i>	9-14-89	DATE
ACRES		X	<i>Signature of Adjuster</i>	9-14-89	DATE
		X	<i>Signature of Witness</i>	9-14-89	DATE

1026-AD FORM NEEDED  
1026 VERIFICATION  
DATE 2-13-88  
TIME 2:00  
ASCS PERSON CONTACTED

1026-AD FORM NEEDED  
1026 VERIFICATION  
DATE 2-13-88  
TIME 2:00  
ASCS PERSON CONTACTED

WW	TOTAL AMOUNT PAYABLE—SUM OF COLUMN Z	XX	AMOUNT OF LOSS APPLIED TO PREMIUM (MPO) PREM. ONLY	YY	NET AMOUNT PAYABLE—LINE XX	ZZ	DRAFT NUMBER



The nine counties pooled \$142,500 and contracted with Weather Modification, Inc. of Bowman, who retained Alex Koscielski as project meteorologist, and placed three aircraft in the target area. Mr. Koscielski, a former Texan and research meteorologist at South Dakota's School of Mines and Technology, claimed that as a result of long experience he could tell "80 percent of the time" which cloud is "good" for modification. The meteorologist explained the use of silver iodide for seeding, saying that there would be no rain without pollution.\*

When we introduce an agent (silver iodide), we launch the process of contact nuclearization [sic]--artificial embryos around which raindrops can form. When they get heavy enough they fall (*The Sunday Forum* July 14, 1974, p. D3).

The article continued,

. . . The cloud seeding adds heat, makes the clouds more vigorous. Since hail suppression often means the breaking up of the storm cloud with a decrease in precipitation, Koscielski must decide if hail loss or rain loss will have the greater economic impact.

It's a multi-million dollar decision, but Koscielski feels that his experience, his radar view, and his flow of information from pilots aloft make it possible to guess right that 80 percent of the time.

NODAK's executive secretary Zittelman calculated that the 1974 nine-county operation cost .0206 cents/acre. Barnes County taxpayers paid a per-acre cost of just over three cents; Griggs and Steele Counties paid one and one-half cents per acre. With wheat at \$5/bushel, "figure it out yourself what another 10 or 15 percent of moisture can do for you," Walter Stine observed.

Weather modification is not a substitute but an adjunct to good farming. It's just another handy tool (*The Sunday Forum* 1974, D3).

NODAK negotiated a 1975 contract with Weather Modification, Inc. for \$128,800 to conduct the 1975 season (*Bismarck Tribune* April 5, 1975: 16). Funding for eight counties came from the two-mill levy (Barnes, Benson, Eddy, Foster, Griggs, Kidder, Nelson, and Wells). Support from Burleigh County was raised by funds from townships and private donors. Funding from Stutsman and Steele Counties was initially uncertain; Steele County did have a program in 1975 while Stutsman did not. 1974 turned out to be the last year of seeding in Stutsman County. The 1975 NODAK effort was active from May 15 through August 31.

The NODAK group passed a motion in early April 1975 to ask the state legislature for cost-sharing with the weather modification program (*Bismarck Tribune* April 11, 1975). Representative Lawrence Dick (R-Engelvale) said that the cities favored weather modification and "want to pay their share." The motion asked for 75 percent of project

\*Mr. Schock said in 1988 that these comments created public relations problems for the state program.



EXHIBIT 72  
DATE 3-17-93  
HB SB72

Mr. Chairman and Members of the Committee:

I am Doris Waller and I live on a farm and ranch near Circle, Montana.

I ask for your help to pass SB72. However, there is one change I would like to see made in that bill.

I would like to see Section I, paragraph 2, changed so that ALL PROJECTS, whether research or otherwise, comply with the law in the same manner. I see no reason why research projects or any of the other projects mentioned should be exempted from the permit requirements for several reasons. First, IT LEAVES A BACK DOOR OPEN for out of state interests to enter. Next, those projects also BUS THE RAIN AROUND like any other project, THEY DROP SILVER IODIDE ON US just like any other project, and THEY CAN CREATE FLOODS AND DISAPPEAR OUR CLOUDS like any other project, SO WHY SHOULD THEY NOT HAVE TO COMPLY WITH THE LAW the same as any other project?

It is a terrible sin in the eyes of many to use animals for experiments which might someday help to save human lives, but yet there seem to be those who think it is alright to use humans for experiments. That is exactly what they are doing with weather modification projects, whether they are experimental or operational.

I also think the time has come for the BURDEN OF PROOF TO REST WITH THE INVADERS instead of us. For far too long we have been asked to prove that they are harming us. NOW LET THE OTHER SIDE PROVE THEY ARE BENEFITTING US! This should apply to ALL PROJECTS, whether they are operational or research.

Please consider these requests and help us pass SB72 so we can get on with other business.

I thank you for your time and hopefully for your support.

Mr. Chairman and Members of the Committee:

EXHIBIT 73  
DATE 3-17-93  
HB SB 72

My name is Doris Waller and I live on a farm and ranch near Circle, Montana. I come here today to ask you for your help. Because our present weather modification law no longer serves the best interests of Montanans, I ask for your help in changing this law.

As our legislators, you are responsible for protecting the interests of the people of Montana, NOT THE INTERESTS OF THE PEOPLE OF ANOTHER STATE!

I am sure that when our present weather modification law was written, it was intended to protect the Montana people. However, we have found out the hard way it does not protect us, so we need a change, and we need it now.

In the spring of 1992, for the third time in as many years, our Board of Natural Resources again denied a permit for North Dakota to come into Montana to seed our clouds. The right to grant or deny this permit was given to the Board of Natural Resources by our State law.

What did North Dakota do then? They took it to Court, a Montana Court, where one Judge made the decision. Because of the way our law was written, she ruled in favor of North Dakota and ordered our Board of Natural Resources to issue a permit to the North Dakota Atmospheric Board to seed the clouds over Montana? I don't think one person should be able to overrule a Board of seven, especially when this was a right and duty of this board given to them by our state law!

This should never have happened and we must take steps to see it never happens again. We need a change, and we need it now.

In 1992 North Dakota asked to come into Montana a distance of 20 miles to seed our clouds---they compromised with us and they were really giving us a big deal, or so they seemed to think. How many of you think they stop within the 20 miles? I don't, and I don't think many others do either, but that is beside the point. They could just as well have asked for 50 miles, 100 miles, or for that matter, asked to go clear to our western border. If they would have done that, do you think that would have made any difference on how the Judge ruled? Not one whit! And then how many people would have been impacted? This is another reason we need a change and we need it now!

The people of the North Dakota Atmospheric Resources Board freely admit that it is not intended to benefit Montana in any way, and many of us in Eastern Montana believe that it is very harmful to us. To my way of thinking, if something is not going to benefit me, and in all probability will harm me, then it is time to change the rules!

Let's pass SB60, let's do it now and get on with other business that is facing our State. I prefer SB60 because this would end once and for all, all the meetings, hearings and testimony preparation we have to attend and make, and maybe by passing SB60 it might avoid another conflict at some future date with another state or another entity and there would not be the opportunity for loopholes like there is in the present law. THE PEOPLE OF MONTANA, THE STATE OF MONTANA AND OUR DEPT. OF NATURAL RESOURCES, do not have the time, the money or the patience to continue this battle.

I would also like to take this opportunity to ask you to consider all the signatures on petitions opposing the issuance of a permit that were gathered in 1992. These signatures of concerned people were ignored at our hearings and Court action, again because of our present law. I do not know just how many were gathered as a total, but there were many, and I do know I gathered 208 signatures in a small area around my home with very little effort and time spent and others worked in other areas. One lady told me she had something over 400 signatures and I could have gotten more signatures if I had tried. I know I lost quite a few signatures when some petitions at business places in Circle mysteriously walked off & the same thing happened to at least one other person gathering signatures. These people who signed this petition are also concerned and since their voices were not heard at the times of the hearings or Court action, I ask you to hear them today. It is not only those of us here that want to stop this cloud seeding, but those people as well.

I thank you for your time, and hopefully your support.

(2)

HCR 1, Box 19  
Regent, ND 58650

EXHIBIT 17  
DATE 3-17-93  
HB SB 72

Since the state of Montana is having a discussion about weather modification, I find it necessary to drop you a line expressing my feelings on the subject.

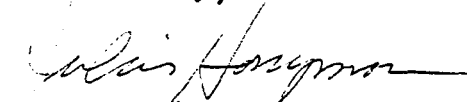
I am a farmer and resident of Hettinger County, North Dakota, and we have had weather modification in our county since the early sixties. The program was voted down by our residents in 1988.

Weather modification promoters talk about rain increase. PHOOEY! My own rain records show the past 15 years, rainfall through the months of June, July and August (when weather modification activities are practiced), averaged 1.20 inches below normal. This is further reinforced by weather modification's own records, showing treated counties receive less rainfall than the surrounding counties that have no weather modification program.

Weather modification promoters say they decrease the hail by 47%. NUTS! If our hail is reduced, then why do the counties (Bowman, Slope and Hettinger) have the highest insurance rates per \$100 coverage in the state of North Dakota (currently \$15 per \$100)? All of the surrounding counties pay a lesser premium. If weather modification is working so well, why are counties pounding on the door to get out rather than knocking to get in. Keep in mind that weather modification used to be active in nearly all of the North Dakota counties, and now they are down to a scant five.

A program of this type should be growing on it's own merits and shouldn't have to be shoved down the resident's throat. My advice to anyone thinking of a modification program - Leave it alone, you'll get burnt, you'll get dry, you'll get mad, you'll still get plenty of hail, and you'll probably lose all of your morals when you see them breaking up your clouds. Don't be lead into a program that does nothing but harm!

Sincerely,

  
Julius Honeyman

*Submitted by  
Joe Timberlake*

RECALL PETITION FOR THE ABOLITION OF THE  
 SLOPE COUNTY WEATHER MODIFICATION AUTHORITY

We, the undersigned qualified electors of Slope County, North Dakota, by this petition request and demand that the Slope County Board of County Commissioners adopt a resolution recalling all commissioners of the Slope County Weather Modification Authority and abolish their appointed office and abolish such weather modification authority in accordance with Section 61-04.1-28 of the North Dakota Century Code.

The purpose of this petition is to abolish the Slope County Weather Modification Authority which will also abolish and eliminate the power of such weather modification authority to certify any mill levy tax for weather modification activities in conjunction with the State of North Dakota..

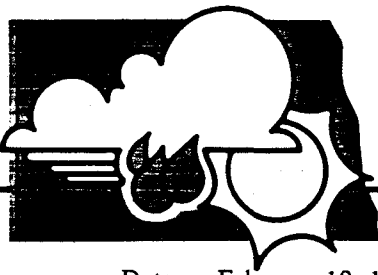
COMMITTEE FOR PETITIONS

The following electors of Slope County, North Dakota are authorized to represent and act for us, and shall constitute the "Committee for the Petitioners" in the matter of this petition and all acts subsequent thereto:

<u>Henry Braker Marmarth ND</u>	<u>Charles Erickson New England ND</u>
<u>Don Flor Marmarth ND</u>	_____
<u>Scott Braker Marmarth ND</u>	_____
<u>Don Jorvick Marmarth ND</u>	_____

	Date	Petitioner Signature	Residence Address, P.O. Box-City-County-State
1	6/3	Don Flor	Box 53 Marmarth ND Slope ND
2	6/3	Linda Flor	Box 53 Marmarth Slope ND
3	6/3	Rose Flor	Box 84 Marmarth Slope ND
4	6/3	Loyola Abraham	Box 214 Marmarth Slope ND
5	6/3	Wesley H. Tucker	Box 16 Marmarth Slope N.D.

This document is stored at the Historical Society at 225 North Roberts Street, Helena, MT 59620-1201. The phone number is 444-2694.



NORTH DAKOTA

# Weather Modification Association

1501 N. 12TH ST. • BOX 2599 • BISMARCK, ND 58502 • 701-223-4232

EXHIBIT <sup>16</sup>  
DATE 3-17-93  
HB SB 72

Date: February 19, 1993

To: Members, Committee on Natural Resources

From: Jay Sandstrom, President, North Dakota Weather Modification Association *Jay*

Re: Senate Bill No. 72

Dear Committee Member:

The attached information is provided at the request of Representative Gilbert. He has noted, as has this association, that information regarding North Dakota cloud seeding operations over extreme eastern Montana is in short supply in Helena. We are aware of frequent misstatements regarding the program's effects and safety, and feel it necessary to attempt to "set the record straight" in some small way.

First let me note that operations are conducted (if they're conducted) over two small "buffer zones" at the extreme eastern end of the state (see enclosed map). Last year, cloud seeding was conducted over Montana on only four occasions, each of rather limited duration. Total time actually spent seeding was only 3.31 hours. The average seeding time for a full season (not just August like last year) has ranged from eight to twelve hours, for the whole summer. While seeding is conducted for effect in North Dakota, previous examinations of our program conducted by Montana DNRC technical staff indicate no adverse effect in Montana. In fact, in a technical memorandum issued in 1991, DNRC staff indicated that if Montana sees any effect at all, it is likely positive. This statement was based upon the fact that seeding *accelerates* precipitation development, and *does not delay it*. At any rate, the seeding has been very limited, designed only to subdue damaging hailstorms as they move into North Dakota. This Association finds it very interesting that because of this finding, in 1992 the technical staff were told that they would make no recommendations, and that the Board of Natural Resources and Conservation (BNRC) would "handle it".

The drought that has brought on this debate about the merits of our program has not been a localized phenomenon, but instead has been regional. An attached graph of seasonal precipitation totals for Sidney (within the buffer) and Miles City (well west of it) is enclosed. The data are taken directly from the *National Climatic Data Center's* publication titled *Climatological Data - Montana*. What it shows is that when Miles City is dry so is Sidney, and when Miles City is wet, so is Sidney. Opponents of our program would have you believe that our very limited seeding in a very limited area is responsible for a regional effect. We are aware of no evidence that supports this conclusion.

That's why, when after the BNRC acted to deny the permits, we elected to appeal. It seemed to us that the BNRC had ignored our supporting documentation, and had decided well in advance of the hearing what the outcome would be. The judge agreed, noting that there existed no factual basis in the record for such a denial, and ordered the BNRC to issue the permits, which they eventually did. This year, the approach of those opposing us has changed. Failing to win on a factual basis, they are now asking you to deal with it from an emotional, political approach. There are a number of Montanans who support our program, and appreciate what it does for them. Many signed petitions of support, including businessmen from the Fairview and Sidney areas. These petitions were submitted during last year's hearing, and were made part of the formal record, but apparently had no weight with the BNRC.

We're not asking for much, and our program is certainly not guilty of causing any harm. I ask only that you do your best to separate the emotion from the facts, and then that you act on a factual basis. Thank you for your consideration.

# Sidney

% of normal rain  
Jun-Aug 1985-91  
Source: NOAA/NCEC

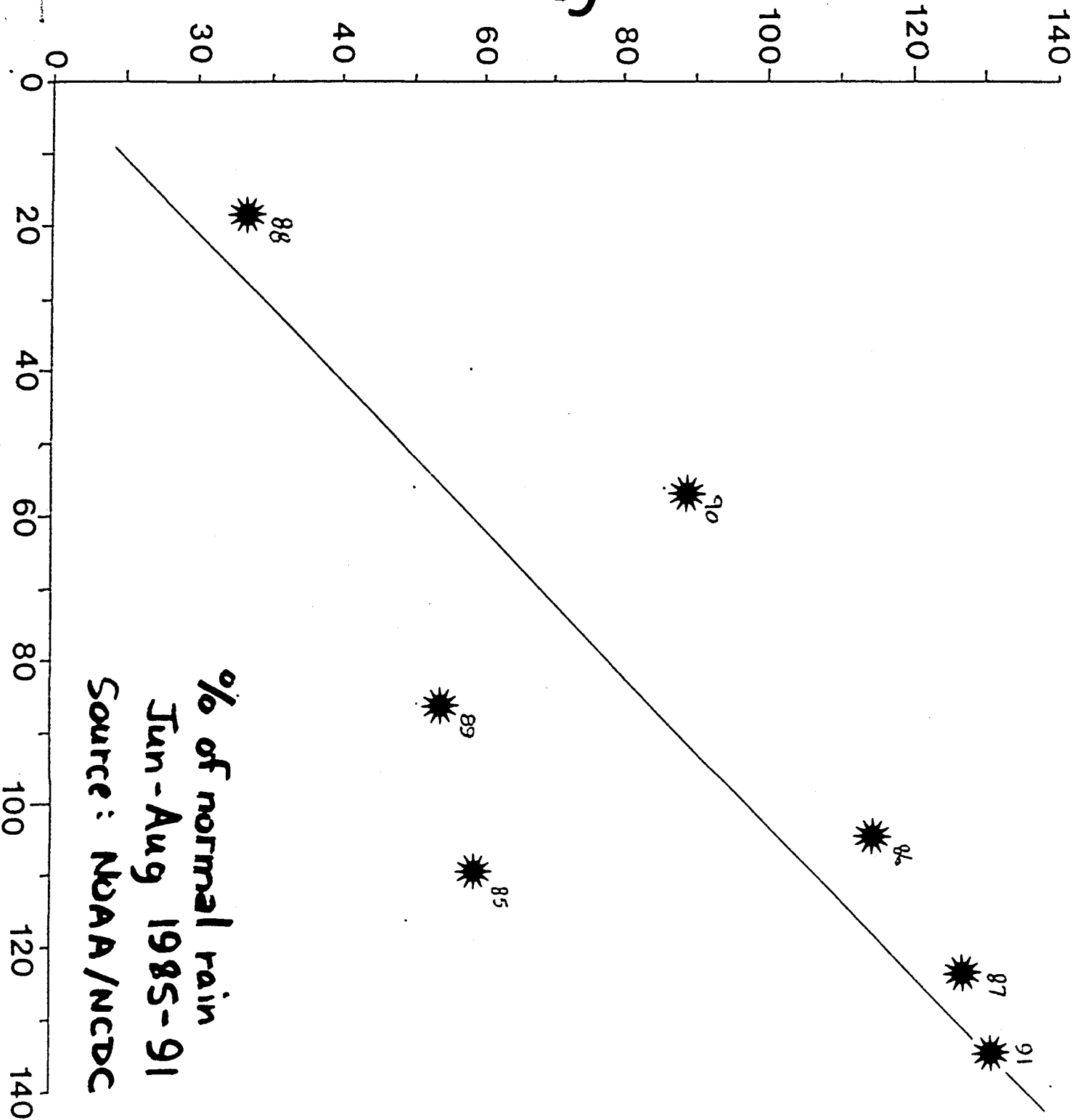
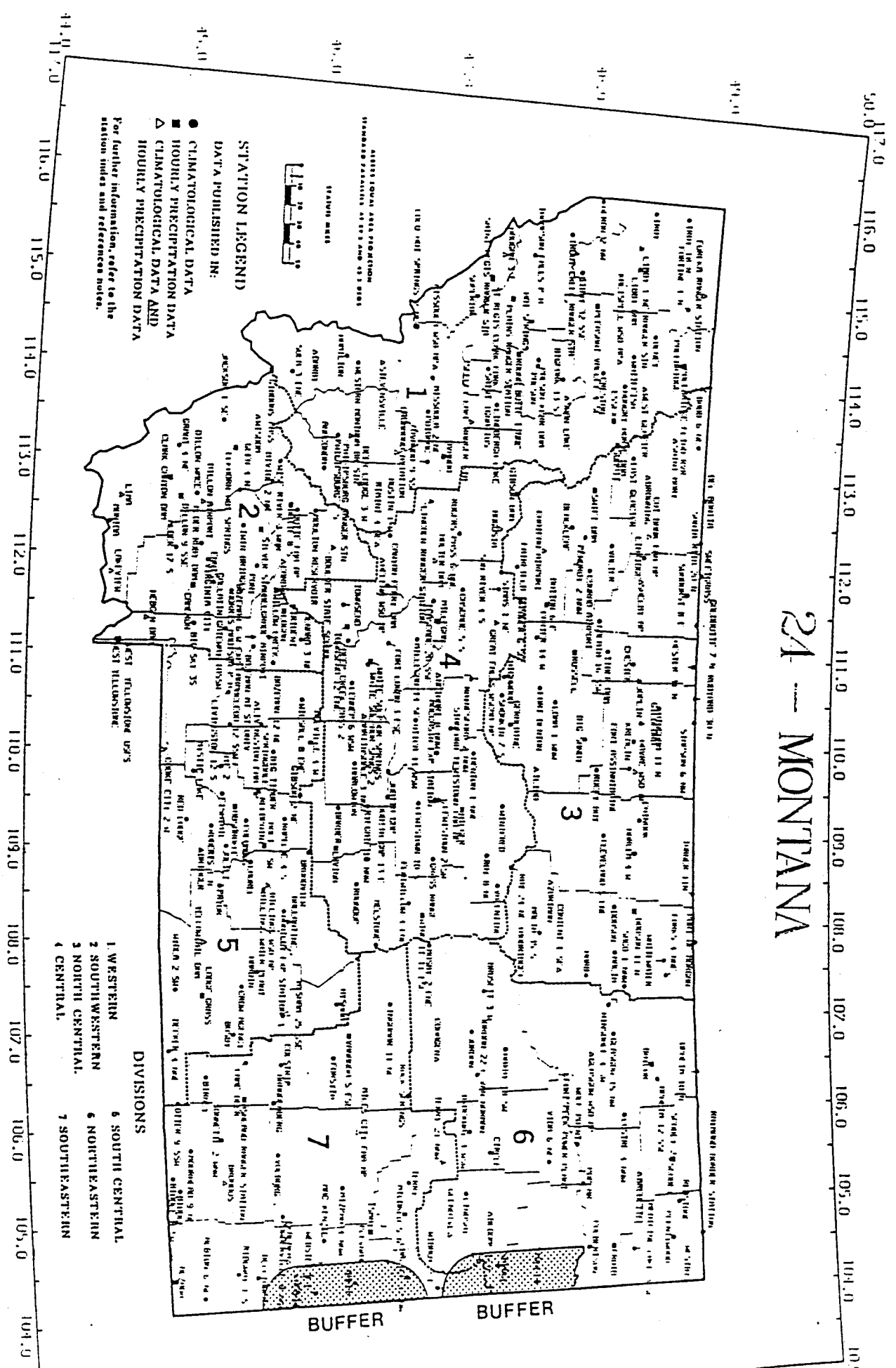


EXHIBIT 76  
DATE 3-17-93

SB72

Miles City

# 24 - MONTANA





Who's using it, and where?

# Cloud seeding: What does the technology have to offer?

In North Dakota, we sometimes get the feeling that we're alone when we talk about operational cloud modification; often called "weather modification" or "cloud seeding". Most of us aren't aware of how far the technology has advanced in the last decade, or of how widespread operations have become. However, we're far from alone. Water managers across the Western United States have chosen to apply the technology as another of the tools in complete water management packages. The *Western States Water Council* and the *Interstate Council on Water Policy* both endorse the development and application of cloud seeding technology. In 1992, the *American Meteorological Society* (Boston) and the *World Meteorological Organization* (Geneva) both issued revised policy statements which were more positive and encouraging than ever before.

Other western states with cloud seeding programs include the following: Arizona is designing a program for snowpack augmentation. California, perhaps the most environmentally conscious state, now has 21 projects at last count, including cities, utilities, and irrigation. Colorado has snowpack augmentation programs for skiing and irrigation. Idaho has a

snowpack augmentation project in southern portion of the state. Kansas has an ongoing hail suppression and rainfall enhancement project. Nevada operates a substantial snowpack augmentation in the Sierra Nevada. Even Oregon has a rainfall enhancement program in its eastern "rain shadow". Texas has several rainfall enhancement projects in western portions of the state. Utah operates a nearly statewide snowpack augmentation program, and Wyoming has a snowpack augmentation program for irrigation purposes in the Eden Valley.

Other states, including Nebraska, Illinois, Oklahoma, and South Dakota, in the last few years have expressed interest in starting projects, or have conducted exploratory operations. North Dakota isn't alone, just a leader.

Foreign nations with active projects presently include: Australia, Austria, Argentina, Brazil, Bulgaria, China, Chile, France, Germany, Greece, Hungary, India, Israel, Indonesia, Italy, Jordan, Libya, Madagascar, Malaysia, Morocco, Norway, the Philippines, several Russian republics, Saudi Arabia, Spain, South Africa, Thailand, Turkey, the United Arab Emirates, Yugoslavia, and Zimbabwe.

## A big impact on North Dakota economy

Since the mid-1980's a number of *independent* evaluations of the effects of North Dakota's cloud seeding program have been conducted. Institutions conducting these evaluations included North Dakota State University<sup>5</sup>, Colorado State University<sup>4</sup>, Amos Eddy, Inc.<sup>2</sup>, the Oklahoma Climatological Survey<sup>1</sup>, and the South Dakota School of Mines & Technology<sup>3</sup>. *Every one of these evaluations has indicated a positive effect. These reports are summarized as follows:*

**Rainfall - increases from 7% to 14%, in and downwind of target**  
(Eddy<sup>1</sup> and Cooter<sup>1</sup>, 1979; Eddy<sup>2</sup> *et al.*, 1982; H. Johnson<sup>1</sup>, 1985)

---

**Hail - decreases averaging 43% in target areas**  
(Smith<sup>3</sup>, Miller<sup>3</sup>, and Mielke<sup>4</sup>, 1987)

---

**Wheat Yields - up 6% in target areas**  
(Smith<sup>3</sup>, L. Johnson<sup>3</sup>, Priegnitz<sup>3</sup>, Mielke<sup>4</sup>, and J. Johnson<sup>5</sup>, 1992)

---

**Economics- costs \$.10/acre, direct benefits \$2 to \$8/acre**  
(Enz<sup>5</sup> *et al.*, 1982; Schaffner<sup>5</sup> *et al.*, 1983; J. Johnson<sup>5</sup> *et al.*, 1989)

Complete copies of these evaluations can be obtained by contacting the responsible institution, or by writing to the Atmospheric Resource Board, 900 East Boulevard, Bismarck, ND 58505.

# Peter vs Paul: Who wins waterwise when clouds are seeded?

For years, its been called the "Peter and Paul" argument. The question is: "When clouds are seeded, do the areas downwind get less rain because more was taken out upwind?" The answer to this question is a resounding "NO!", but the reasons aren't obvious unless one considers some of the mechanics of the northern Great Plains hydrologic cycle.

First, consider the water budget of a typical thunderstorm. The efficiency of a given storm is the ratio of how much precipitation (rain and hail) falls, to the total water vapor taken in from the atmosphere as a whole. A typical storm might ingest 3% to 5% of the available atmospheric moisture around it-- most of the water vapor in the sky never gets into the storm at all. Remember, most storms draw in air primarily from the lowest few thousand feet nearest the ground. A storm that converts one tenth of this water vapor to precipitation is not unusual, for the other 90% remains in the atmosphere as cloud droplets and ice crystals, too small to fall out, or simply evaporates back into the air. Thus, the 10% increase in rainfall due to cloud seeding would be 10% of the 3% to 5% initially sucked into the storm, or about 0.5% change in what remains in the atmosphere.

However, the hydrological cycle is just that, *a cycle*, and water that falls from a storm doesn't cease to exist. It is recycled, quickly evaporated back into the atmosphere, much of it used by plants as they grow. The low level atmospheric moisture, so critical for thunderstorm development, is thus replenished. Examination of weather records shows that years with adequate rainfall are those years having higher humidities. This is logical; more rain is likely to fall downwind from a forest or well-vegetated area than from a desert or semiarid region. In a very real sense, precipitation one day increases the chances for precipitation in the same area and downwind of it the next-- *a positive feedback mechanism*.

But still, that's not the whole answer to the "Peter and Paul" question. Any climatologist or meteorologist well acquainted with North Dakota weather patterns will tell you that most low level moisture, so essential to the production of adequate rainfall, comes *not from the Pacific Ocean, but from the Gulf of Mexico*. While it is true that the weather systems themselves most often originate to our west, it is the southeasterly low level flow in advance of these systems that pumps the Gulf moisture into the state. Take a look at the average precipitation patterns over the state. The wettest portion of the state is the part closest to the water source-- the southeast, while the driest is the furthest away, the northwest. Thus, arguing that seeding to the west of a location deprives that location of moisture by diverting it makes little sense, as most of the *essential low-level* moisture is flowing in from the southeast, not the west. In summary:

☛ *The changes in the whole atmospheric water budget are 1% or less.*

☛ *The additional rainfall that results from seeding is NOT LOST, BUT RECYCLED.*

☛ *The major moisture source is southeast, not west, of the target clouds.*

*Cloud seeding is a water management tool which allows existing clouds to better utilize their energy, producing more rainfall and decreasing hailfall.*

Everybody wins.

# Radars provide boost for local civil defense efforts

Weather radars used to guide cloud seeding operations are the same as those presently used by the National Weather Service in North Dakota. Project meteorologists operating the radars based in Parshall and Bowman work closely with the Weather Service offices in Bismarck and Williston, providing supplementary and backup radar coverage of severe weather as it develops. This benefit extends beyond North Dakota, eastern Montana and northwestern South Dakota also benefit.

Project aircraft also seed mature, lightning-producing thunderstorms by flying at cloud base in the "inflow" region in

advance of the storm. Such missions make spotting of lightning-caused range fires easy. The observation is made, a radio transmission to the district radar follows, and a telephone call notifies the appropriate rural fire department-- perhaps within a minute after the fire starts.

Though storms which develop funnel clouds or tornadoes are *never* seeded, they are monitored by project aircraft. The intensity, direction of movement, and storm speed are relayed first to the radar, then to the appropriate National Weather Service Office, from which the public warning is issued.

NOV 20 '92

ND ATMOSPHERIC  
RESOURCE BOARD  
NATIONAL WEATHER SERVICE  
ROOM 212, ADMIN. BUILDING  
LOGAN INTERNATIONAL ARPT.  
BILLINGS, MT 59105

NOVEMBER 17 1992

BRUCE BOE, DIRECTOR  
NORTH DAKOTA ATMOSPHERIC RESOURCE BOARD  
900 EAST BOULEVARD  
BISMARCK, NORTH DAKOTA 58505-0850

SUBJECT: LETTER OF APPRECIATION FOR RADAR DATA PROVIDED  
BY NORTH DAKOTA RADAR NETWORK AT BOWMAN, ND.

Dear Mr. Boe,

One of the primary missions of the National Weather Service is to reduce the risk from life/injury threatening weather events.

We are constantly trying to upgrade the quality of service provided to people in our area of responsibility. During the past severe weather season, your radar office at Bowman helped us to improve our services to people in Southeast Montana.

While the summer of 1992 was relatively quiet in terms of severe weather for Southeast Montana, the Bowman office still was able to provide much needed accurate radar information to our office.

Our staff appreciated the cooperation and information given by the Bowman staff. On behalf of Mr. Bert Nelson, MIC and his staff; please convey our "thanks" to Darin Langerud and Rory Mitchell for their assistance this past season.

Sincerely yours,

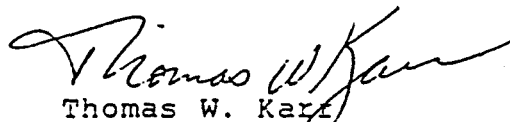
  
Thomas W. Kari  
Disaster Preparedness  
Program Leader

EXHIBIT 76  
DATE 3-17-93  
SB 72

DATE 3-17-93

5672

RADAR COVERAGE

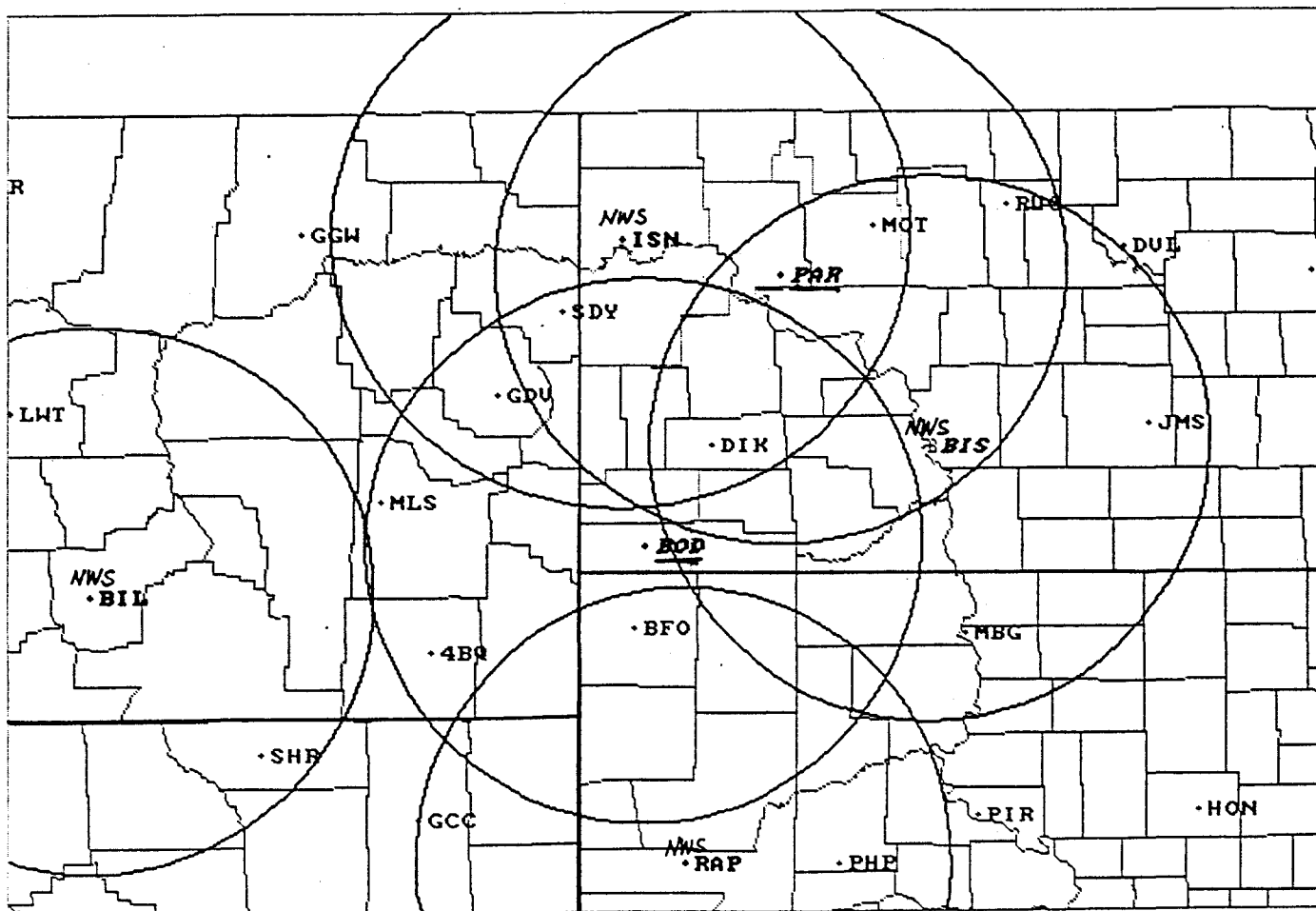
Project weather radars are essentially the same as those deployed by the National Weather Service (NWS), except that the cloud modification radars are slaved to computers which record high-resolution data.

In this figure, the maximum range at which thunderstorms can be quantitatively measured is shown (125 statute miles). Weather service radars are shown in blue, project radars in red.

Note that a significant portion of southeastern Montana is essentially without radar coverage, except for that provided by the project.

When severe weather is observed by project air crews or detected by radar, the appropriate NWS office is immediately notified.

When Weather Service radars are inoperative, project radars have acted as backup until the NWS radar is back in service. [In the last few years, only the Williston radar has had problems with any frequency.]



# MODERN CLOUD MODIFICATION

## supercooled water

When the top of a growing cumulus cloud cools to less than 32°F, cloud droplets *do not immediately freeze*, but instead become **supercooled**. In spring and summer clouds over the northern High Plains, ice often does not form until cloud tops cool to temperatures of 5°F or colder. Then, tiny wind-blown dust and soil particles called **ice nuclei**

**On-Top Seeding:** nuclei or dry ice released directly in the supercooled cloud; flares or pellets fall into updraft.

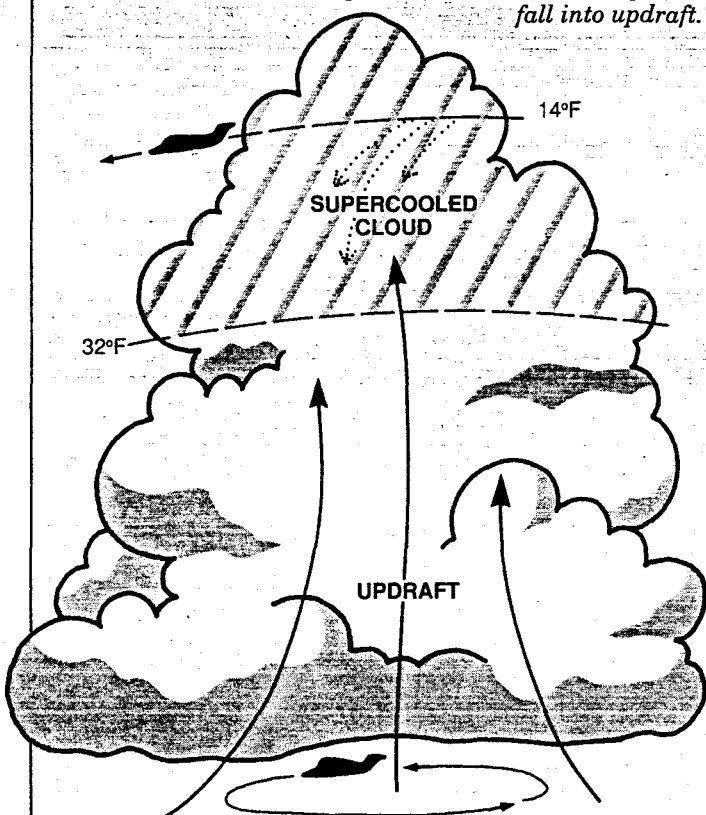
serve as crystalline skeletons upon which droplets freeze and snowflakes form. If ice does not develop in the short-lived summertime clouds, the cloud droplets eventually mix with the drier air outside the cloud and evaporate.

When the high, supercooled, cumulus cloud tops do not speedily spawn ice, raindrops can only form through the collision of the minuscule cloud droplets. This process, called **coalescence**, takes a long time to get started because the cloud droplets (diameter about .0005 inch) are so small that they swirl about in the air currents, and do not readily collide. The chances of such small droplets colliding are poor, and it may take nearly a million to form a single average-sized raindrop!

## a nudge in the right direction

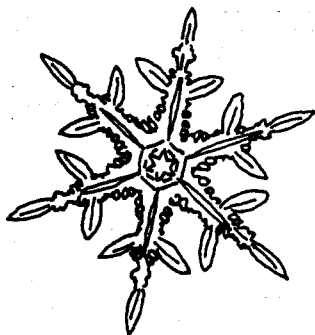
When nature is reluctant to produce ice in supercooled clouds, it is possible to lend a hand by providing the ice nuclei that nature is lacking. This is commonly known as **cloud seeding**. Clouds can be "seeded" with a variety of ice-inducing agents. The most common are silver iodide and dry ice. When silver iodide is used, small amounts (an ounce or less) are burned in flares or solution in the cloud top or in the updrafts at the cloud base. If dry ice is used, marble-sized pellets are dropped into the growing cloud from above. The rapid development of large numbers of small ice crystals soon follows.

Once ice particles form, they continue to grow by **deposition**, **riming**, and **aggregation**. Deposition is the process that generates delicate snow-

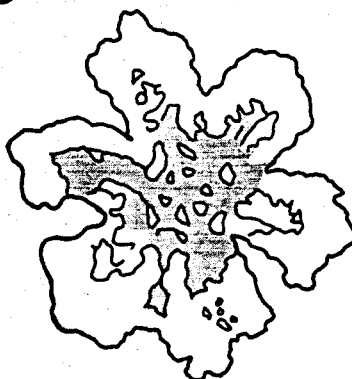


**Cloud-Base Seeding:** nuclei released in updraft.

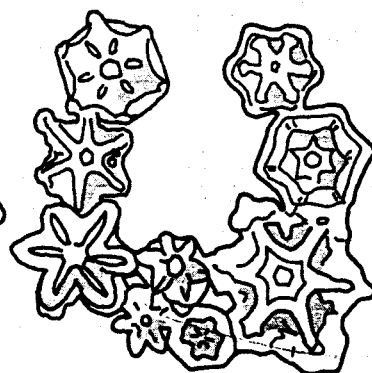
**Deposition:** Water Vapor is deposited in crystalline form, making ice without first condensing.



**Riming:** Supercooled cloud droplets freeze instantly when they collide with existing ice particles, glazing them.



**Aggregation:** Ice crystals collide and stick together, building snowflakes.



# weatherguide

ND ATMOSPHERIC RESOURCE BOARD PUBLICATION

EXHIBIT 76

DATE 3-17-93

## what can be expected?

A well-run, adequately funded seeding operation employing aircraft for a seeding and weather radar for guidance can result in significantly less hail damage (30 to 60 percent reduction), and limited but very valuable increases in precipitation (on the order of 10 to 15 percent).

## when should cloud seeding be considered?

Any part of the northern High Plains suffering significant hail damage on a regular basis would likely benefit significantly from hail suppression operations. In addition to the direct savings realized, long term programs which establish lower hail risks in target areas will also enjoy lower crop hail insurance premiums.

Additional growing-season rainfall will prove very beneficial to any locale short of moisture, especially semi-arid regions suffering chronic shortages.

Longer-term applications of cloud seeding tech-

nology may lessen the impact of droughts by creating greater soil moisture reserves prior to the onset of drought conditions, and may accelerate recovery by increasing the rainfall when weather patterns return to normal.

Because cloud seeding simply enhances the natural efficiency of clouds, it may be of limited use during extended periods of drought, when suitable clouds are in short supply.

## additional reading

### General

**Understanding Our Atmospheric Environment**, second edition, by M. Neiburger, J. Edinger, and W. Bonner. W.H. Freeman and Company, San Francisco, CA, 1982. or write: Weather Modification Association, P.O. Box 8116, Fresno, CA, 93747.

### Advanced

**Hail: A Review of Hail Science and Hail Suppression**, edited by G.B. Foote and C.A. Knight. Meteorological Monographs, Volume 16, American Meteorological Society, Boston, 1977.

**Weather Modification by Cloud Seeding**, by A.S. Dennis.

EXHIBIT 76  
DATE 3-17-93  
SB 72

ATMOSPHERIC RESOURCE BOARD  
A DIVISION OF THE ND STATE WATER COMMISSION  
900 EAST BOULEVARD AVE.  
BISMARCK, ND 58505  
701-224-2788

Printed in cooperation with the North Dakota Weather Modification Association  
1991

✓ 4-11-91

# LELAND RED ANGUS RANCH

Meivin & Luella Leland

Skaar Route Box 4089

Sidney, MT 59270

Phone 701/565-2347

April 11, 1991

Senator Larry Tviet  
State Capitol  
Helena, MT

EXHIBIT 77

DATE 3-17-93

HB SB72

Dear Senator Tviet:

I apologize for being unable to come to Helena to personally oppose the permit to allow the Weather Modification the privelege of flying over Montana air space to seed clouds.

I am a rancher in western North Dakota. We operate along the state line in McKenzie County and extend eastward into North Dakota about 10 miles. I have lived on this ranch for over 40 years. Prior to 1978, I recall only one time when we experienced hail damage; that being in the mid sixties and then only about 50%. Since the weather modification program started, we've had three devastating hail storms (1978-82-83) that broke windows, ruined roofs, stripped leaves and bark from the trees and in general left no growing vegetation salvageable for feed. We have had several small hail storms since but without wind and only minimal damage. It's common knowledge our area has experienced over 10 years of severe drought since 1979. The only exceptions were 1982 and 1986 which produced adequate moisture but in 1982 we hailed out.

It is the claim of Weather modification that they can accelerate precipitation and suppress hail. I'm not suggesting that they cannot, quite possibly they can, however, I am suggesting that in the attempt to do so they are interfering with the delicate balance of nature. If in fact, the aerial seeding accelerated the precipitation of the hail clouds that hit us, it is conceiveable that had they not interferred the clouds would have precipitated later and at least partially missed us. As a rancher, I can accept any natural disaster imposed by God. I live with nature and can accept God's will. I cannot accept man's interference with things that are best left up to God. I believe man's interference ultimately disrupts the natural development and flow of weather patterns.

When I am reminded that I am taxed .07 per acre to have this imposed on me, I have to wonder if anyone in Weather Modification is accountable for their actions. In a nutshell, since Weather Modification has been imposed, I've experienced greater hail loss by many times over and the 10+ years of drought out of the past 13 years certainly doesn't support any arguement that their activity has appreciably increased precipitation in any way.

I respectfully urge you to deny their permit to fly over Montana skys. Since our weather patterns are from west to east, at least if they only start their seeding directly over me, their detrimental effect on my operation will be somewhat limited. This is the feeling of all the people in my neighborhood.

Sincerely,

*Meivin Leland*

Meivin Leland

# OIL EXPRESS

February 15, 1993

EXHIBIT 18  
DATE 3-17-93

HB 58 196

exclusive report serving informed petroleum marketers nationwide

**Inside this week**

Chemical deal jeopardized P.2  
One-stop shopping plan faces expansion P.3  
Oil firms major acquisitions P.4  
Aldrich problem with CATS pumps P.5  
Singles Marching as MW partners P.6  
Coburn has \$100MM to loan marketers P.7  
Chevron-Exxon swap threatened P.8

**GASOLINE PRICE BAROMETER**

Prices were in a holding pattern all week thanks to an OPEC meeting in which the cartel agreed to a 1 million b/d production cut. Analysts expect that gasoline prices will stay steady until about mid-March, when it will be seen whether the group can maintain the cut.

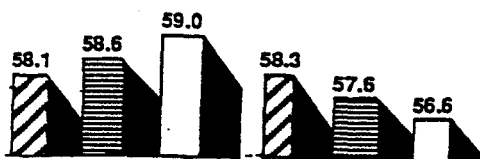
Fundamentally, however, east of the Rockies markets are oversupplied some believe ready for a price drop. Western markets have some legitimate tightness.

**Average U.S. Contract Price**

(in cts/gal)

Unleaded Gasoline

No. 2 Oil

**Average U.S. Spot Price**

(in cts/gal)

Unleaded Gasoline

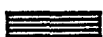
No. 2 Oil



Source: Oil Price Information Service



Current week



Previous week



Year ago

**Clark launches same-price premium promotion**

In a bold street pricing move designed to increase premium sales, 12-state Midwest marketer Clark is pricing its 92-octane premium gasoline at parity with its other two unleaded grades, Oil Express has learned.

Clark launched the program in northern Illinois, Indiana, Michigan and Ohio last week after a successful test of the same-price deal in Chicago, southern Illinois and northwestern Indiana. In the test markets, Clark saw premium sales soar and it hopes to keep about 5% of the increase after, say Oil Express sources. Clark's goal is to increase premium sales from 20% of sales to about 25% marketwide, say sources.

Rather than spend big bucks on additives, ad campaigns and game giveaways, Clark believes it can accomplish a 5% premium gain more effectively with price. Customers get used to "buying up" when prices are equal, and they stay with the grade as spreads move back to normal.

Clark isn't the first to use this strategy -- Conoco used it to boost premium sales in Colorado (OE 1/27/92).

**Farmers Home Administration plans rule to combat clean-up costs****U.S. eyes tank removal as condition for home loans**

The Farmers Home Administration is considering adopting a policy that would require farmers and owners of oil heat homes to certify that their underground tanks have been removed and soil and groundwater cleaned up before it will issue a loan to a buyer, Oil Express learns.

Only exception to the rule would be if the farmer or homeowner could show that his tank isn't leaking, is in serviceable condition, will outlive the life of an FmHA loan, and that there's no contamination from the tank.

The proposal is one of several soon to be put before FmHA's new administrator by agency officials who say it's their duty to protect FmHA's loan portfolio from costly clean-up claims. Other options include a blanket demand that all tanks be removed, says Don Lander, an FmHA official. FmHA should be ready to propose the rule by June.

Such a rule could have a chilling effect on marketers at a time when banks and insurers are increasingly leery of environmental liability, say some.

For example, some New England banks are now refusing mortgage requests from oil-heat home buyers, says Bill Weidmann, a tank contractor in the residential market.

"It's gotten worse over the last two years. Banks say it's not their fault, it's the federal regulators looking over their shoulder all the time," says Weidmann, who says tank replacement business is down nearly 90%.

In the Midwest, there are similar reports of banks



reluctant to lend on oil-heat homes, fearing potential liability will make it hard to resell mortgages in secondary markets, say Michigan and Wisconsin jobbers.

Marketers learned of FmHA's plans when FmHA in North Carolina suddenly started making tank removal and clean-up a condition of loans if farmers and homeowners could not prove their tanks were tight and would last longer than an FmHA loan. There was no public disclosure of the new policy beforehand, say marketers.

PMAA has asked outgoing FmHA Administrator LaVerne Ausman to rescind the rule, which it says was adopted without formal notice. Anyway, farm and residential tanks are exempt from regulation under Resource Conservation and Recovery Act (RCRA), it informed her.

Not only did Ausman refuse to rescind, but said FmHA was looking at a similar policy for national application.

"In our estimation, the costs associated with these measures are not unreasonable, nor are they excessive for most sellers," Ausman told PMAA. "Should there be high costs involved in assuring that a property does not or will not violate environmental laws, we believe they should be borne by the current owner before any sale."

Making taxpayers pick up clean-up bills isn't right, says Ausman. In North Carolina alone, FmHA spent more than \$346,000 to clean up 26 sites and \$40,000 to dispose of dirty soil, and expects to pay more. While it has tapped North Carolina's tank fund to pay clean-up costs, Ausman says she doubts there's enough money in the fund to take care of all the contaminated sites in the state.

North Carolina FmHA had no obligation to disclose its new policy -- its rules require it to finance decent, safe and sanitary housing, and to protect Uncle Sam's interests, and that's just what it's doing, adds Ausman.

PMAA tried to talk FmHA out of a national rule for a year, but to no avail. It has now submitted proposals that should give FmHA a degree of comfort, short of tank removal. For example, FmHA could do corrosion analyses, check soil for vapors and install cathodic protection. If a tank was tight, it could require monitoring, either via inventory analysis or observation wells that drivers could check when making heating oil deliveries, it says.

FmHA has agreed to look at PMAA's proposals, but is still intent on issuing some kind of rule, says Lander.

● Footnote: What's bad news for heating oil marketers is good news for others. New Jersey-based Continental Insurance is now looking at the profit potential of selling homeowner pollution policies, while home inspector trade groups are starting to stage seminars for their members on how to check residential tanks for leaks.

## Chevron offers Southern stations to marketers

Continuing a streamlining effort to divest stations in non-metro areas, Chevron is offering direct units in Georgia for sale to jobbers and dealers.

In rural Georgia, Chevron will try to sell company-ops to jobbers while offering lessee dealers first shot at buying their stations, says Wally Young, Chevron's regional property manager. Stations not sold to marketers will likely be sold for non-gasoline uses. Chevron has about 15 company-ops in Macon, Savannah and Columbus.

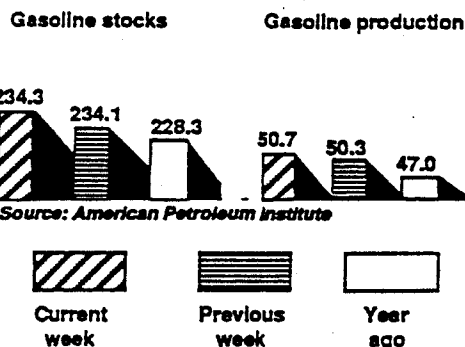
## GASOLINE SUPPLY BAROMETER

Without the backdrop of the impending OPEC meeting, gasoline data could be viewed quite bearishly. This is particularly true in the Mid-Atlantic, where inventories are 8 million bbl ahead of the average 1990-92 levels.

Nationwide gasoline stocks are only slightly above previous years, but large builds could be forthcoming. Gasoline production of 7.25 million b/d is believed to be an accurate figure, but imports of 210,000 b/d are probably understated. Meanwhile, this week's implied demand figure of 7.4 million b/d is probably 500,000 b/d above real demand. All of this arithmetic points to possible inventory builds on gasoline of as much as four or five million bbl per week.

Unfinished oil stocks also climbed last week and that could portend higher gasoline production in the future. Runs are quite low in Pad 5, but they are even or above previous years in other regions.

### U.S. Refinery/Inventory (in million barrels)



### GASOLINE SUPPLY BAROMETER (Stocks in thousands barrels)

	Week ended 2/11/92	Week ago	Year ago
<b>TOTAL MOTOR GASOLINE</b>			
PAD 1	67,978	66,290	60,556
PAD 2	63,090	63,010	61,156
PAD 3	62,241	64,326	65,209
PAD 4	6,547	6,454	7,187
PAD 5	34,409	33,991	34,143
TOTAL US	234,263	234,071	228,251
<b>UNLEADED MOTOR GASOLINE</b>			
PAD 1	62,016	60,156	56,685
PAD 2	63,413	63,652	63,282
PAD 3	45,107	46,922	49,215
PAD 4	3,731	3,804	4,014
PAD 5	24,438	23,930	22,265
TOTAL US	188,706	188,464	185,461
UNFINISHED	84.6	85.3	81.6
Ref: %operated	210	206	111

Source: American Petroleum Institute

DATE 3-17-93HB SB 1916

3-17-93

Mr Chairman and member of the committee.

For the record my name is Gordon Darkenton at Three Forks and I support SB196 of Senator Duvine. I planned to give oral testimony but due to the lateness of the hour and the fact that the livestock must be cared for I will leave this written note.

For over 25 years the Three Forks Flying Club has had an underground tank which furnished gas for the members to their planes. The tank was carefully checked each filling to see that there was no leakage. About 15 years ago the tank developed a small leak and about 50 gallons of fuel was lost. The tank was immediately replaced with a new tank and no more leaks were ever observed.

When the new rules on underground tanks came into place we could no longer have gas placed in the tank without building an underground protection area that was way ~~off~~ beyond the financial abilities of the club. The club agreed to have the tank removed and purchase gas from a commercial operator 25 miles away. This was very time consuming and costly to the member.

I called the club secretary last night and as of this date it has cost \$3500 to have the tank removed and all the necessary testing completed. It still is not totally approved. This is only a small part of the bill as nearly all of the labor and machines used were donated by club members.

on this bill as I feel it is very necessary  
if these old underground tanks across the state  
are to be removed or made unusable.

Thank you for this opportunity:

Gordon Darkenton  
Three Forks, MT.



LEWIS AND CLARK

# CITY-COUNTY HEALTH DEPARTMENT

City-County Building  
316 North Park  
Box 1723  
Helena, Montana 59624  
Telephone 406 / 447-8200

EXHIBIT 80  
DATE 3-17-93  
HB SB 196

## TESTIMONY IN-OPPOSITION TO SENATE BILL 196

There are 682 underground storage tanks listed as active in Lewis & Clark County. Of that number, 356 are smaller than 1100 gallons. These tanks make up 52% of the total active tanks in our County.

Of the 92 leak sites identified throughout the County, 58 (63%) are at sites with tanks smaller than 1100 gallons. The number of small tanks in our county is a substantial portion of the total number of tanks. In addition, the majority of the leak sites are located within city limits.

The size of the tank is immaterial when it comes to environmental damage. In my experience as a licensed underground storage tank inspector, some of the worst cases of tank deterioration and leakage I have seen are from small 500 gallon farm and resident underground tanks. These are not remote sites that pose negligible impacts to the environment. They are sites that overlie an unprotected, vulnerable aquifer.

The threat to groundwater from small tanks is significant. By allowing owners to remove tanks without notification to the UST program, there is no way to track or monitor tanks that may have contaminated soils or groundwater. With the high water tables (5-30 feet below land surface) throughout most of the populated areas of this county, small leaking tanks pose a serious threat.

There are also fairness and safety issues to be addressed. Many responsible tank owners have gone through the permitting and tank removal process. They have paid the permit and sampling fees. They have had the expertise of both the Underground Storage Tank staff and licensed inspectors using detection equipment to make tank removals safe for everyone involved. Circumventing permit requirements, which is what Senate Bill 196 does, is unfair to those citizens who have complied with the regulations. It also puts unqualified people at risk in removing their own tanks.

As supervisor of Lewis & Clark County Water Quality Protection District, I feel Senate Bill 196 is less protective of the environment, especially of groundwater in a county with high water tables and threatened aquifers. I strongly urge you to oppose Senate Bill 196.

Vivian Drake, Supervisor  
Water Quality Protection District  
Lewis & Clark Health Department  
316 N. Park, Helena



MISSOULA CITY-COUNTY HEALTH DEPARTMENT

301 W ALDER ST

MISSOULA MT 59802-4123

<b>FAX</b>		DATE <u>3-17-93</u> #PGS <u>2</u>
TO <u>John Geach</u>		
CC	FAX# <u>444-1499</u>	
FROM <u>Peter Nielsen</u>	AVERY FX-10	

EXHIBIT 81 (406) 523-4755DATE 3-17-93HB SB 96**Testimony of Missoula City County Health Department**

Regarding Senate Bill 196

Submitted to House Natural Resources Committee

March 17, 1993

Prepared by Peter Nielsen

Environmental Health Division Supervisor

**RECEIVED**

MAR 17 1993

MDHES  
Solid and Hazardous Waste  
Management Programs

My name is Peter Nielsen. I am the Supervisor of the Environmental Health Division at the Missoula City-County Health Department. The Missoula City-County Health Department is very concerned about the potential passage of Senate Bill 196.

Five years ago a major underground storage tank leak occurred in Missoula. The leak came from a tank that would be exempted from regulation by this bill - a 600 gallon tank which was privately owned and not used for commercial distribution and sales. The leak eventually affected 19 homes in the Missoula urban area to the extent that all of the private wells on those properties had to be abandoned.

Unfortunately, the gasoline, waste oils and solvents which are stored in small tanks may have the same devastating affects on drinking water as the same substances stored in larger tanks. Because a large percentage of the tanks proposed for exemption in SB196 are located in urban areas relatively close to property boundaries where a leak has a high likelihood of affecting someone else's well or property, it is not appropriate to exempt this class of tanks from regulations or fees. It should be noted that many of the infamous Church Universal and Triumphant underground tanks which caused so much trouble in Park County would be exempted from regulation by this Bill.

We feel the State's first priority should be to ensure that state waters which are used for public and private water supply purposes are protected as a source of drinking water. Small underground storage tanks are a significant threat to groundwater because they represent a large percentage of the underground storage tanks in the State of Montana.

SB196 would allow an owner or operator of a 1,100 gallon or smaller non-commercial tank to remove the tank without the services of a licensed installer. Removal of tanks that have stored flammable liquids is a very hazardous task. If people remove tanks without the proper precautions, they may cause a very significant risk of fire or explosion. For this reason, SB196 would significantly reduce the protection of public safety.

SB196 would require an owner or operator to notify the department if a leak is discovered during tank removal. The bill would also require the owner to initiate response and abatement procedures

EXHIBIT 81  
3-17-93

10 101211014441452 P.02

immediately after discovering a leak. Because underground tank release cleanup can be very expensive for owners and operators, the temptation will be very strong to avoid reporting leaks and initiating cleanup. The voluntary reporting and compliance aspects of this bill will certainly lead to a significant amount of non-compliance by tank owners and operators. As a result, groundwater pollution similar to that we have experienced in Missoula may occur and we will have very limited ability to track or efficiently control the source of pollution.

This bill is clearly intended to reduce the cost of tank removal for small tank owners. Instead, it may increase the costs of tank removal and cleanup for both the public and the small owners the bill attempts to protect. Tracking down pollution sources and cleaning up groundwater contamination is very time consuming for public agencies, costly for the public, and eventually much more costly for the tank owners than preventing pollution or responding before contamination spreads from the site of the release. Responding to fires, explosions or hazardous materials releases associated with improper removal of underground tanks would also impose significant costs on the public.

For these reasons we urge the House Natural Resources Committee to kill Senate Bill 196.

Testimony SB 196

Petroleum Tank Release Compensation Board  
Jean Riley -- Executive Director

The Petroleum Tank Release Compensation Board (Board) opposes SB 196 as amended. The Board administers the Petroleum Tank Release Cleanup Fund (Fund). The Fund is used to reimburse owners and operators of petroleum tanks for costs incurred for cleanup of contamination or third party damages for property damage and bodily injury.

This legislation results in the tank owner not having to meet the basic requirements for tank removal but would allow them to seek reimbursement from the Fund. Meeting basic compliance requirements for closure protects the owner and any third parties from potential damage due to explosion, fire, or environmental hazards. Improper closures can actually increase cleanup costs, therefore, creating a larger liability to the Fund.

This is the main reason the Board does not support SB 196. Thank you for your time.

# LAKE COUNTY LAND SERVICES

## PLANNING AND SANITATION

106 Fourth Avenue East  
Polson, Montana 59860-2175  
Telephone (406) 883-6211

EXHIBIT 83

DATE 3-17-93

HB SB 196

March 17, 1993

Representative Dick Knox  
Chairman House Natural Resources Committee  
Capitol Station  
Helena, MT 59620

RE: SB 196 - Exemption of Noncommercial Farm and Residential Underground Storage Tanks that are 1,100 Gallons or Less in Capacity from the Closure Requirements.

Dear Senator Knox:

This letter is to express opposition to SB 196. This bill is an obvious attempt by a few to circumvent a regulation instituted for the protection of the health and welfare of all.

The closure process as it currently exists offers protection for both the tank owner and the public. The purpose of the required soil and water sampling and the licensure of the remover or the inspection of the removal site is to give credibility to the conditions at the site. It is difficult at best to defend oneself against an accusation that your removed UST contaminated a neighbors well. The existing closure system supplies both hard laboratory data and physical witnesses to the condition of the tank and site that can refute any accusations.

In Lake County, many tanks both less than and greater than 1100 gallons have been removed. The size of a tank has no bearing on its soundness or its potential to contaminate the environment. The majority of the noncommercial UST's less than 1100 gallons removed in Lake County have had contamination from leakage or over spill.

This legislation would also disrupt the tank removal certification and environmental review required on all FHA loans. At this time FHA, at least in Lake County, requires a letter from the Montana Department of Health and Environmental Sciences and soil sample results showing that the tank has in fact been removed and the site is clean.

In addition it is questionable whether or not these noncommercial sites would be eligible for Petro Fund reimbursement should a leak be discovered.

Your opposition to this bill is strongly urged.

Thank You.



Rebecca J. Dupuis. R.S.

RJD/las

administ\knox.317



### **WHY DO I HAVE TO NOTIFY ON A TANK I AM REMOVING?**

"Notification" refers to the process of completing a notification form and sending it to our office. The notification form documents basic information about the underground storage tank and its location. Owners and operators of UST systems that were in the ground on or after May 8, 1986, unless properly taken out of operation on or before January 1, 1974, are required to file notification on the tank(s) or underground pipe system(s). Montana's Petroleum Tank Release Compensation Fund (PTRCF) can provide financial compensation for the costs of cleanup of petroleum contamination that may have resulted from the operation of an UST. Eligibility for reimbursement from the PTRCF is determined in part by evidence of compliance with the regulations. An underground storage tank system that is not notified is not in full compliance with Montana's regulations.

### **CAN AN UNDERGROUND STORAGE TANK BE RE-INSTALLED ABOVEGROUND?**

Underground storage tanks, in most instances, have been designed for underground use. These tanks have been constructed with a reliance upon external pressures of backfill material to assist the tank in retention of its shape. If tanks intended for underground use are installed aboveground, they are subject to internal pressures and could suffer tank collapse resulting in large spills. Such incidents may create fire, health and environmental problems for the owner.

### **WHY IS IT NECESSARY TO PAY THE TANK REGISTRATION FEE EVEN THOUGH I AM NOT USING THE TANK?**

The underground storage tank rules require that the owner or operator pay the annual tank registration fee unless the tanks have been permanently closed (removed from the ground or properly filled in-place) and a site assessment has been completed to document the absence of contamination. Payment of this registration fee is one of the eligibility requirements of Petro Fund (PTRCF) reimbursement in case any contamination is found associated with the tank.

### **WHAT DO I DO IF THE TANK DID LEAK?**

A leak must be reported to the Underground Storage Tank (UST) Program by the owner or operator within 24 hours. Cleanup of any contamination must be directed by the UST Program to qualify for cleanup funds.



### **WHAT IS A SITE ASSESSMENT?**

A site assessment at tank closure or removal means measuring for the presence or absence of contamination that may have resulted from a leak or spill at the tank site. Soil samples are collected at least one to two feet below the base of the maximum excavation depth for each tank and pipe removed or closed in-place. Laboratory analysis of the soil samples is required to confirm the absence of a leak or soil contamination. If groundwater is encountered, then a water sample is also collected and sent to the laboratory for analysis.

### **WHY DO I NEED TO CONDUCT A SITE ASSESSMENT?**

To protect the groundwater and evaluate whether the soil or water has been contaminated by leaks or spills at a tank site, the Federal Environmental Protection Agency (EPA) and Montana underground storage tank regulations require that each tank closure includes a site assessment. Also, when the property is sold, the buyer as well as the lending institution and realtor will want documentation that the tank was properly closed and did not leak.

## HOW SHOULD I CHOOSE A LABORATORY FOR MY SAMPLES?

The Department has compiled a list of laboratories which conduct the soil and water analyses most often required for tank closure. The list is not an endorsement of any listed company. Since the cost of sample analysis and the length of turn-around-time may vary significantly from one laboratory to another, we recommend contacting a number of companies for the best service and price. Many laboratories will also provide you with the proper sampling containers and shipping materials.



## IS THERE ANY HELP IN PAYING FOR A TANK CLOSURE OR CLEANUP OF CONTAMINATION?

The cost of routine tank closures or removals are not eligible for reimbursement from the Petroleum Tank Release Compensation Fund. However, corrective action or cleanup costs from a spill or leak may be reimbursed from the Fund. Owners or operators are eligible for reimbursement if their tanks are in compliance with the Federal and State UST regulations. Components of compliance include notification, annual tank registration, leak detection monitoring, leak reporting, permitting compliance and proper tank closure. For more information on eligibility for cleanup funds contact the Petroleum Tank Release Compensation Board at 449-8717.

## WHO CAN I CONTACT FOR MORE INFORMATION ON CLOSURE OF MY UNDERGROUND STORAGE TANK?

If you have questions which have not been answered in this brochure, please contact our office at the following address and phone number:

Underground Storage Tank Program  
Solid & Hazardous Waste Bureau  
Department of Health & Environmental Sciences  
Cogswell Building  
Helena, MT 59620  
(406) 444-5970

3000 copies of this public document were published at an estimated cost of 21¢ per copy, for a total cost of \$630.00, which includes \$630.00 for printing and \$0.00 for distribution.

This document was printed on recycled paper.

## EXHIBIT 84 DATE 3-17-93 SB 96 REQUIREMENTS FOR UNDERGROUND STORAGE TANK CLOSURE



A question and answer guide  
on the closure of underground  
storage tanks provided by the  
Montana Department of Health  
and Environmental Sciences

HOUSE OF REPRESENTATIVES  
VISITOR REGISTER

*Natural Resources* COMMITTEE

BILL NO. *SB 338*

DATE *March 17, 1993* SPONSOR(S) *D. Yellowtail*

PLEASE PRINT

PLEASE PRINT

PLEASE PRINT

NAME AND ADDRESS	REPRESENTING	SUPPORT	OPPOSE
<i>Randy White</i>	<i>Ashgrove</i>		<input checked="" type="checkbox"/>
<i>B. Thompson</i>	<i>Ashgrove</i>		<input checked="" type="checkbox"/>
<i>Mike Thomas</i>	<i>Ashgrove</i>		<input checked="" type="checkbox"/>
<i>Richard Johnson</i>	<i>"</i>		<input checked="" type="checkbox"/>
<i>Chris Frank</i>	<i>"</i>		<input checked="" type="checkbox"/>
<i>Bryan Wright</i>	<i>"</i>		<input checked="" type="checkbox"/>
<i>Cliff Smith</i>	<i>"</i>		<input checked="" type="checkbox"/>
DENISE HAYMAN	Small Business Owner FAMILY OF 4	<input checked="" type="checkbox"/>	
Jackie Daggy	Family of 4	<input checked="" type="checkbox"/>	
Michelle Wilcox	Family of 3	<input checked="" type="checkbox"/>	
RACHAEL RAUESIRS	Family of 6	<input checked="" type="checkbox"/>	
<i>Carol Johnson</i>	<i>Family of 4</i>	<input checked="" type="checkbox"/>	
<i>Wayne Shong</i>	<i>Family of 2</i>	<input checked="" type="checkbox"/>	
<i>JOHN WILSON</i>	<i>Self &amp; Family</i>	<input checked="" type="checkbox"/>	

PLEASE LEAVE PREPARED TESTIMONY WITH SECRETARY. WITNESS STATEMENT FORMS ARE AVAILABLE IF YOU CARE TO SUBMIT WRITTEN TESTIMONY.

HOUSE OF REPRESENTATIVES  
VISITOR REGISTER

Natural Resources COMMITTEE BILL NO. SB 338  
DATE March 17, 1993 SPONSOR(S) D. Yellowtail

PLEASE PRINT

PLEASE PRINT

PLEASE PRINT

NAME AND ADDRESS	REPRESENTING	SUPPORT	OPPOSE
Daily Baker Wilson Reed Mt	Holnam		X
Brooke Martin 28509 Norris Rd Bozeman, SD 57115	Sierra Club	X	
TIM MYERS Box 996 THREE FORKS, MT	HOLNAM		X
Mark Bouldin 421 No 17th Bozeman MT	Holnam		X
Ben + Todd Box 252 MT.	HOLNAM		X
Bill Jan Box 365 Three Forks MT	HOLNAM		X
Tom Mathison Box 626 Mafellwmt	HOLNAM		X
STANLEY VELTKAMP Box 232 MANHATTAN MT	HOLNAM		X
JERRIE STIPCICH 3782 E Riggs E. HLN	Ash Grove		X
KAREN COE 612 S. SANDERS Helena, MT	ASH GROVE		X
BERYL THIEL 100 FAIRWAY HELENA	ASH GROVE		X
PAM CERRY Box 22 THREE FORKS	Holnam		X
Stephen Carey Box 22 S Forks	Holnom INC.		X
MICHAEL COLLINS HELENA 201 S. HANNAFORD	ASH GROVE		X

PLEASE LEAVE PREPARED TESTIMONY WITH SECRETARY. WITNESS STATEMENT FORMS  
ARE AVAILABLE IF YOU CARE TO SUBMIT WRITTEN TESTIMONY.

HOUSE OF REPRESENTATIVES  
VISITOR REGISTER

*Natural Resources* COMMITTEE

BILL NO.

*SB 338*

DATE *March 17, 1993* SPONSOR(S) *B. Yellowtail*

PLEASE PRINT

PLEASE PRINT

PLEASE PRINT

NAME AND ADDRESS	REPRESENTING	SUPPORT	OPPOSE
Denise Kemp	Ashgrove		X
Paul A Bessler	Ashgrove - self		X
Timothy Smith	Boilermakers D-435		X
Jeff Howard	Boilermakers D-435		X
Tony Huso	Boilermakers D-435		X
PATRICK Sanger	Boilermakers D-435		X
Jackie Helms Torba	family (5)	X	
Marilyn Atkins <sup>mt city</sup>	self & husband	X	
Bob Wilkinson 3 FKS	Self & Holman		X
Leon LORR 3 FKS	Self & Holman		X
Tommy LORR 3 FKS	Holman		X
Doug Dandene 3-FKS	Holman		X
Julene W. <sup>Whitehall</sup> <del>Shannon</del>	Holman		X
Parrel B. Lomris	Holman		X

PLEASE LEAVE PREPARED TESTIMONY WITH SECRETARY. WITNESS STATEMENT FORMS ARE AVAILABLE IF YOU CARE TO SUBMIT WRITTEN TESTIMONY.

HOUSE OF REPRESENTATIVES  
VISITOR REGISTER

Natural Resources COMMITTEE BILL NO. SB 338  
DATE March 17, 1993 SPONSOR(S) D. Yellowtail

PLEASE PRINT

PLEASE PRINT

PLEASE PRINT

NAME AND ADDRESS	REPRESENTING	SUPPORT	OPPOSE
DON BRIMHALL Box 159 R. HALLING	SELF	X	
Arnie Johnson 1481 Portman Rd Boz. Bnd CAMPBELL Deer Lodge	Self	X	
Wyneth Frost Bozeman MT	Self.		X
Renae Motil Helena	Self	X	X
Donna Dundas Three Forks			X
Donna Dundas Three Forks			X
George McMiller	Self		X
DENNIS SEMPRINI	CITIZENS FOR SITTING. F SELF	X	
Pam Smith Helena	Self	X	
Tom Daubert	Ash Grove Cement		X
Dan Peterson	Ash Grove Cement		X
Ruthie Weiskenny	Self	X	
Will F. Seber	LTC City-Co. Health		X

PLEASE LEAVE PREPARED TESTIMONY WITH SECRETARY. WITNESS STATEMENT FORMS  
ARE AVAILABLE IF YOU CARE TO SUBMIT WRITTEN TESTIMONY.

## HOUSE OF REPRESENTATIVES

## VISITOR'S REGISTER

Natural Resources

COMMITTEE

BILL NO.

SB 338

DATE

3/17/93

SPONSOR(S)

SEN. YELLOWTAIL

PLEASE PRINT

PLEASE PRINT

PLEASE PRINT

NAME AND ADDRESS	REPRESENTING	BILL	OPPOSE	SUPPORT
al Hill Box 105 MT. CITY		338	X	
TRISH PETERSON 33 Cloverview Helena	Self	338	X	
Danni Peterson 726 S. Hedger Bozeman	Self	338	X	
Pam Paluska	Holnam - SELF	338	X	
JUDY BECK	Self & family	338		✓
Dexter Busby	Montana R/ny	338	X	
REX MANUEL	CENEXO	338	X	
JOANN KARKU	Self			X
Walt Schuele	Schuele Ranch	338		✓
Elizabeth Brewer	Brewer Ranch	338		✓
Maura Kusek	Kusek Family	338		✓
Gymn Keller	Self	338		✓

PLEASE LEAVE PREPARED TESTIMONY WITH SECRETARY. WITNESS STATEMENT FORMS ARE AVAILABLE IF YOU CARE TO SUBMIT WRITTEN TESTIMONY.

HOUSE OF REPRESENTATIVES  
VISITOR REGISTER

*Natural Resources* COMMITTEE BILL NO. *SB 338*  
DATE *March 17, 1993* SPONSOR(S) *B. Yellowtail*

PLEASE PRINT

PLEASE PRINT

PLEASE PRINT

NAME AND ADDRESS	REPRESENTING	SUPPORT	OPPOSE
<i>Box 927 Clancy</i> <i>Sue Barton</i>	<i>self</i>	✓	
<i>NITA FREEMAN Helena</i>	<i>Self</i>	✓	
<i>Box 713</i> <i>Barry McEes Three Forks</i>	<i>self</i>		✓
<i>Rick BACH, Box 149 MCR</i> <i>CLARK, MT</i>	<i>SELF</i>	✓	
<i>CLANCY</i> <i>PAUL SMETANKA</i>	<i>SELF</i>	✓	
<i>R.F. MORGAN</i>	<i>SELF</i>	<del>✓</del>	
<i>William W. Hall</i>	<i>Self</i>	<del>✓</del>	
<i>Pamela Carlson</i>	<i>Family (3)</i>	✓	
<i>Deanna Bergman</i>	<i>Family 4</i>		✓
<i>Steve Weber</i>	<i>Family 3</i>	✓	
<i>Edie Venson</i>	<i>MAT</i>		
<i>DAVID LAZAROW</i>	<i>Self</i>		✓
<i>John F. Fitzpatrick</i>	<i>Pegasus Gold Corp</i>		✓
<i>John Fitzpatrick represent</i> <i>Montana Mining Association</i>			✓

PLEASE LEAVE PREPARED TESTIMONY WITH SECRETARY. WITNESS STATEMENT FORMS  
ARE AVAILABLE IF YOU CARE TO SUBMIT WRITTEN TESTIMONY.



HOUSE OF REPRESENTATIVES  
VISITOR REGISTER

Natural Resources COMMITTEE BILL NO. SB 338  
DATE March 17, 1993 SPONSOR(S) D. Yellowtail  
PLEASE PRINT PLEASE PRINT PLEASE PRINT

NAME AND ADDRESS	REPRESENTING	SUPPORT	OPPOSE
GARY MILNER 508 N. 3RD BOZEMAN MT	ECOVOICE	✓	
JULIE STOUGHAN 607 1/2 S 7th AVE BOZEMAN MT	ECOVOICE	✓	
WILL SWEARINGEN 1121 S. 3RD AVE BOZEMAN		✓	
MARSHALL SWEARINGEN 1121 S. 3RD AVE BOZEMAN		✓	
WAYNE R. ALLEN BOX 202 THREE FORKS MT.			✓
Geary & Suzanne Crawford 9350 Woodenshoe LN Manhattan MT 59741			
JACK CANAVAN Box 10 Columbia Falls MT 59912	CFAC		✓
Bill Slovensky 611 Gullston Belgrade			✓
Edna Johnson Pony mt			✓
Lila Johnson Pony mt			✓
JON HESSEN THREE FORKS MT.			✓
Roy Anders Box 721 MCR Clancy, MT. 59634	Me		✓
Klornie R. Roehrer Three Forks MT	HOLNAM + AMERICA'S FUTURE		✓
Helen Waller SR 278 Evelyn, MT	MAPG + NPROC	✓	

PLEASE LEAVE PREPARED TESTIMONY WITH SECRETARY. WITNESS STATEMENT FORMS  
ARE AVAILABLE IF YOU CARE TO SUBMIT WRITTEN TESTIMONY.

HOUSE OF REPRESENTATIVES  
VISITOR REGISTER

Natural Resources COMMITTEE BILL NO. SB 338  
DATE March 17, 1993 SPONSOR(S) D Yellowtail  
PLEASE PRINT PLEASE PRINT PLEASE PRINT

NAME AND ADDRESS	REPRESENTING	SUPPORT	OPPOSE
Mike Dalia Box 959 mer clancy 59834	my Family	X	
Joanne Hall SR Box 105 clancy	my family	X	
Cyndy Morey #2 8015 Canyon Ferry, Helena	my FAMILY	X	
Claire Reynolds Box 856 MT City Rt Clancy 59634	my Family	X	
Mariann HUSD 845 mcr clancy	mt. city Resident		X
Jerry Motil Helena	Self	X	
P.O. Box 3098 MCS Preston Price clancy	my Family	X	
Keith Blankenship 566 Highland HELENA, MT. 442-8096	FAMILY		X
BARRY WISEMAN	MATB		X
Lewis R Williams			X
Barb Harris	Self	X	
CHRISTINE MANGIANTINI	League of Women Voters	X	
David Owen	mt chamber of commerce		✓
Tom Tenneson	ASARCO + myself		✓

PLEASE LEAVE PREPARED TESTIMONY WITH SECRETARY. WITNESS STATEMENT FORMS  
ARE AVAILABLE IF YOU CARE TO SUBMIT WRITTEN TESTIMONY.

HOUSE OF REPRESENTATIVES  
VISITOR REGISTER

Natural Resources COMMITTEE BILL NO. SB 338  
DATE 3-17-93 SPONSOR(S) B. Yellowtail

PLEASE PRINT

PLEASE PRINT

PLEASE PRINT

NAME AND ADDRESS	REPRESENTING	SUPPORT	OPPOSE
Bob Churchwell 314 Hilma Rd Helena MT	Ashgrove Cent		X
Margaret Fredrick S Jefferson Tracts Montana City	My family	X	
DWENE W. SHERMAN Whitehall	HOLNAM		X
Bob Wilkinson 3 FKS	Self & Holman		X
TOM BILODEAU	SELF	X	
Aaron Bilodeau		X	
Alex Bilodeau		X	
ERIK SIRS	SELF	X	
Nikolas SIRS		X	
Matthew Forker		X	
Maggie Pittman	family	X	
Lucy Paulson	family	X	
Charles Hall 1450 Prospect #214 Helena	self	X	

PLEASE LEAVE PREPARED TESTIMONY WITH SECRETARY. WITNESS STATEMENT FORMS  
ARE AVAILABLE IF YOU CARE TO SUBMIT WRITTEN TESTIMONY.

HOUSE OF REPRESENTATIVES  
VISITOR REGISTER

*Natural Resources* COMMITTEE BILL NO. *SB 338*  
DATE *March 17, 1993* SPONSOR(S) *B. Yellowtail*  
PLEASE PRINT PLEASE PRINT PLEASE PRINT

NAME AND ADDRESS	REPRESENTING	SUPPORT	OPPOSE
Don Killebrew Clancy, MT.	Ash Grove		X
Jerry Mickey Anaconda	ASH GROVE		X
Patrick Finnegan Three Forks	Holman		X
Randolph T. Setzer Three Forks	Holman		X
Donna Bellet RINGLING MT	LAST OF THE BEST COALITION	✓	
Phil White Hawk RINGLING	"	✓	
KATE NICHOLS LEANNCP	"	✓	
LEW DUNN COALCO CA	SELF	✓	
<i>Donna Steele</i> Manhattan MT	<i>Self</i>		X
Donna Steele Manhattan MT	Holman		X
Charles H Steele Manhattan	Holman		X
Katherine S. Steele Manhattan	Holman		X
Betti Wells	Holman		X

PLEASE LEAVE PREPARED TESTIMONY WITH SECRETARY. WITNESS STATEMENT FORMS  
ARE AVAILABLE IF YOU CARE TO SUBMIT WRITTEN TESTIMONY.

HOUSE OF REPRESENTATIVES  
VISITOR REGISTER

*Natural Resources*

COMMITTEE

BILL NO.

*SB 338*

DATE *March 17, 1993* SPONSOR(S) *D. Yellowtail*

PLEASE PRINT

PLEASE PRINT

PLEASE PRINT

NAME AND ADDRESS	REPRESENTING	SUPPORT	OPPOSE
<i>Diane Phillips</i>	<i>Holnam</i>		✓
<i>Joanne Hensin</i>	<i>Holnam</i>		✓
<i>Bill Hensin</i>	<i>Holnam</i>		✓
<i>Dary Suelen</i>	<i>Ash Grove</i>		✓
<i>Sharon Roadarms</i>	<i>Holnam</i>		—
<i>Heather Roadarms</i>	<i>Holnam</i>		—
<i>Justin Cridcke</i>	<i>Holnam</i>		—
<i>Leslie Trisal</i>	<i>pro SB 338 - transfer</i>	✓	
<i>Pat Fred</i>	<i>" " " "</i>	✓	
<i>Scott Rader</i>	<i>Adgore / Family</i>		✓
<i>Godi Rader</i>	<i>Ash Grove</i>		✓
<i>Larry Luther</i>	<i>Ash Grove</i>		✓
<i>Bruce Thewell</i>	<i>Ash Grove</i>		✓
<i>Bo Thewell</i>	<i>Ash Grove</i>		✓

PLEASE LEAVE PREPARED TESTIMONY WITH SECRETARY. WITNESS STATEMENT FORMS ARE AVAILABLE IF YOU CARE TO SUBMIT WRITTEN TESTIMONY.

## HOUSE OF REPRESENTATIVES

## VISITOR'S REGISTER

Natural Resources

COMMITTEE

BILL NO.

SB 338

DATE

3/17/93

SPONSOR(S)

SEN. YELLOWTAIL

PLEASE PRINT

PLEASE PRINT

PLEASE PRINT

NAME AND ADDRESS	REPRESENTING	BILL	OPPOSE	SUPPORT
<u>Ken Jacobbe</u>	<u>Self</u>			X
<u>Phyllis John Clancy</u> Box 196 Clancy, MT 59634	<u>Self</u>			+
<u>Curtis S. Darnell</u> P.O. Box 199 E. Helena	<u>Self</u>		✓	
<u>Terrance Johnson</u> 430 S. Robert Saunders Rd Box 889 Clancy, MT	<u>Self</u>		X	
<u>Redge Meierhenry</u>	<u>Self</u>			X
<u>Tom Ryan</u> Box 255 Helena, MT 59604	"A SAFE ENVIRONMENT"			X
<u>Kathryn Kelly</u> 80 Pine Seattle WA 98104	<u>Holnam</u>		X	
<u>Herbert W. Bauer</u>				X
<u>Greg Van Horsen Family</u>				X
<u>J.P. Crowley</u>				X
<u>Hobart Collins</u> 858 Abbott Hill Rd. Bremerton	<u>Self</u>	338		X
<u>Jim Hill</u> Box 422 E. Helena MT	<u>Self</u>	338	X	
<u>Christi O. Hill</u> Box 423 E. Helena, MT	<u>Self</u>	338	X	

PLEASE LEAVE PREPARED TESTIMONY WITH SECRETARY. WITNESS STATEMENT FORMS ARE AVAILABLE IF YOU CARE TO SUBMIT WRITTEN TESTIMONY.

HOUSE OF REPRESENTATIVES  
VISITOR REGISTER

*Natural Resources*

COMMITTEE

BILL NO.

*SB 338*

DATE *March 17, 1993*

SPONSOR(S) *D. Yellowtail*

PLEASE PRINT

PLEASE PRINT

PLEASE PRINT

NAME AND ADDRESS	REPRESENTING	SUPPORT	OPPOSE
<i>Anita Quenemoel</i>	<i>self</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Kane Quenemoel</i>	<i>Self &amp; son</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Larry Craft</i>	<i>Alum. Workers Union</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Raymond R. Scorsen</i>	<i>"</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>P.O. Box 778 Columbia Falls MT</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Ron Drake, 95 Lincoln Rd. West Helena</i>	<i>Drake Eng. Incorporated</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Randy NeSmith, P.O. Box 1025 Livingston, MT 59047</i>	<i>Hallett Reclamation</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>RICK ABRAHAM Box 908 MCR Clancy MT</i>	<i>Self</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Ralph Beer &amp; Margaret Beer</i>	<i>Beer Ranch Jackson Crk</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Pat Tallent Box 154 Star Rt, Clancy</i>	<i>Family</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Terri Abraham Box 908, clancy mt</i>	<i>Family</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Geo. Brookhurst Box 169, Livingston, MT</i>	<i>Hallett Minerals</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Cathy Brumhall</i>	<i>Family</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Marilyn R Hice</i>	<i>Family</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

PLEASE LEAVE PREPARED TESTIMONY WITH SECRETARY. WITNESS STATEMENT FORMS ARE AVAILABLE IF YOU CARE TO SUBMIT WRITTEN TESTIMONY.

HOUSE OF REPRESENTATIVES  
VISITOR REGISTER

Natural Resources COMMITTEE BILL NO. SB 338  
DATE 3-17-93 SPONSOR(S) B Yellowtail

PLEASE PRINT

PLEASE PRINT

PLEASE PRINT

NAME AND ADDRESS	REPRESENTING	SUPPORT	OPPOSE
CHARLES T. WEEDENHOFT P.O. BOX 122 DUNDEE, MI 48131	HOLNAM INC.		X
<i>James Anderson</i>	<i>Holnam Inc</i>		X
STUART WEISS, DUNDEE, MI	HOLNAM INC		X
William Springma	Holnam Inc		X
Martha Alsbury	Family of 6	X	
Janet Keller		X	
Don BRIMHALL BOX 159 R. HLN	SELF + FAMILY	X	
Kathy Coleman	Self	X	
Charlie Coleman	Self	X	
Howard W. Harmon	SELF		X
Arianna Sims	Self	X	
SARAH BARWARD	Self	X	
George Paul	Farmers Union	X	

PLEASE LEAVE PREPARED TESTIMONY WITH SECRETARY. WITNESS STATEMENT FORMS  
ARE AVAILABLE IF YOU CARE TO SUBMIT WRITTEN TESTIMONY.



HOUSE OF REPRESENTATIVES  
VISITOR REGISTER

Natural Resources COMMITTEE BILL NO. SB 338  
DATE 3-17-93 SPONSOR(S) D. Yellowtail

PLEASE PRINT

PLEASE PRINT

PLEASE PRINT

NAME AND ADDRESS	REPRESENTING	SUPPORT	OPPOSE
Steve Browning	Columbia Falls Aluminum Co.		X
HEIDI YAKAWICH	Box 182 MCR CLANCY MT 59634	X	
MARY FROST		X	
JOE FROST	BZN	X	
Deb Berglund	Bowman/Gullett Co.	X	
Maureen Chary-Schwinden	self	X	
Chris Pope	Green A. Pelly Mtn By Co	X	
Tim Dunder <sup>THREE FORKS</sup> MT	SELF THREE FORKS, MT		X
Elton Johnson	Holman		X
Lila Johnson	Self		X
Klaudia R. Rodico	Holman FOR A BETTER AMERICA		X
Rich Meis	Treecyc Paper	X	
DENNIS SEMPRINI BOX 744, BOZEMAN	CITIZENS FOR SITING		
Wade Robbins Box 951, MCR Clancy MT	Myself	X	

PLEASE LEAVE PREPARED TESTIMONY WITH SECRETARY. WITNESS STATEMENT FORMS  
ARE AVAILABLE IF YOU CARE TO SUBMIT WRITTEN TESTIMONY.

HOUSE OF REPRESENTATIVES  
VISITOR REGISTER

Natural Resources

COMMITTEE

BILL NO.

SB 338

DATE

3-17-93

SPONSOR(S)

B. Yellowtail

PLEASE PRINT

PLEASE PRINT

PLEASE PRINT

NAME AND ADDRESS	REPRESENTING	SUPPORT	OPPOSE
Paul Johnson, Box 951, MCR Clancy MT	Myself	X	
Annette Cade, Box 475R Clancy 59634	Montana City Self School Board of Trustees	X	
Carol L. Schneider, 211 South I St. Libegson MT 59047	Self	X	
Eric D. Schneider, 211 South I St. Libegson MT 59047	Self	X	
Stephen Cade, Box 147 SR MD Clancy MT 59634	Self	X	
Ed Hall	Self	✓	
Sen John A. Brenden	Self		X
Ben Mc Vitt	MEPC	X	
Janet Ellis	MT Audubon Leg. Fund	X	
Stan Bradshaw	TU	X	
Baird Godvin	Self & Family	X	

PLEASE LEAVE PREPARED TESTIMONY WITH SECRETARY. WITNESS STATEMENT FORMS  
ARE AVAILABLE IF YOU CARE TO SUBMIT WRITTEN TESTIMONY.

16 of 18

HOUSE OF REPRESENTATIVES  
VISITOR REGISTER

*Natural Resources*

COMMITTEE

BILL NO.

*SB 338*

DATE *March 17, 1993*

SPONSOR(S) *D. Yellowtail*

PLEASE PRINT

PLEASE PRINT

PLEASE PRINT

NAME AND ADDRESS	REPRESENTING	SUPPORT	OPPOSE
<i>Randy Bergman 565 Coolee Dr. Bozeman</i>	<i>Holnam</i>		<input checked="" type="checkbox"/>
<i>Morgan Bergman 565 Coolee Dr Bozeman</i>	<i>Holnam</i>		<input type="checkbox"/>
<i>Sam 565 Coolee Dr Bergman Bozeman</i>	<i>Holnam</i>		<input type="checkbox"/>
<i>Joe Morgan THREE FORKS</i>	<i>HOLNAM</i>		<input checked="" type="checkbox"/>
<i>MARY GARCIA 10930 Hwy 287 3-Forks</i>	<i>HOLNAM</i>		<input checked="" type="checkbox"/>
<i>CURT LAWELLIN 10930 Hwy 287 THREE FORKS</i>	<i>HOLNAM</i>		<input checked="" type="checkbox"/>
<i>Deb Hudson 905 MCR Clancy MT 59634</i>	<i>My Family + Small Business</i>	<input checked="" type="checkbox"/>	
<i>DAN HUDSON 905 MCR CLANCY 59634</i>	<i>Family + 3 Businesses</i>	<input checked="" type="checkbox"/>	
<i>Peggy Olson Trunk</i>	<i>WESTERN ENVIRONMENTAL TRILDE ASSN</i>		<input checked="" type="checkbox"/>
<i>Louis R Williams</i>			<input checked="" type="checkbox"/>
<i>Russ Rittel</i>	<i>MRL</i>		<input checked="" type="checkbox"/>
<i>Mt Mining</i>			<input checked="" type="checkbox"/>

PLEASE LEAVE PREPARED TESTIMONY WITH SECRETARY. WITNESS STATEMENT FORMS ARE AVAILABLE IF YOU CARE TO SUBMIT WRITTEN TESTIMONY.

HOUSE OF REPRESENTATIVES  
VISITOR REGISTER

Natural Resources COMMITTEE BILL NO. SB 338  
DATE March 17, 1993 SPONSOR(S) B. Yellowtail

PLEASE PRINT

PLEASE PRINT

PLEASE PRINT

NAME AND ADDRESS	REPRESENTING	SUPPORT	OPPOSE
Ken Williams	Entech		✓
Tamie Vantrosen	self	✓	
Ram Gilbert	self	✓	✓
Jim GILBERT	"		✓
Jim J. Huber	AFFCO Inc.		✓
Tim Huls	Mout Dairynews	✓	
Bucky Price	self	✓	
MA Wellbank	family	✓	
Joan Jacobs	Agriculture Family	✓	
Patly Mott	self	✓	
Joan H. Wierke	self	✓	
Ann Baughman	Family	✓	
Rebecca Johnston	Family / Ranchers in our area	✓	

PLEASE LEAVE PREPARED TESTIMONY WITH SECRETARY. WITNESS STATEMENT FORMS ARE AVAILABLE IF YOU CARE TO SUBMIT WRITTEN TESTIMONY.

HOUSE OF REPRESENTATIVES  
VISITOR REGISTER

Natural Resources COMMITTEE BILL NO. SB 72  
DATE March 17, 1993 SPONSOR(S) J. H. Devlin

PLEASE PRINT PLEASE PRINT PLEASE PRINT

NAME AND ADDRESS	REPRESENTING	SUPPORT	OPPOSE
Bernard Lian HCR 80 Box 475 Zamboni Mt. 59243	N.E. Mont O.C. I.A.	✓	
Joe Steinheiser P#1 Box 3403 Sidney, MT. 59710	self	✓	
Scott A. Stiles Box 306 E Helena	Self		✓
J. H. L. 4425 HELENA HELENA	SELF		✓
Grithen Bingham 87 Forest Park Clancy	Self SB 338	✓	
Jim L. L. L.			
Jamie A. VanHorn	Self SB 338	✓	
Jim Dunder	SELF		X
PAM COLLINS Helena 2000 South Hills Rd	SELF & Family SB 338	✓	
NICK STEVENS 886 SAWHILL-CCR CLANCY, MT.	FAMILY SB 338	✓	
Christine Pahltein 119 S. 6th Bozeman MT	Self & Family	X	
Larry Truitt	Self & Senator	✓	
Tom Bruback	Self	✓	
George Paul	Farmers Union	✓	

PLEASE LEAVE PREPARED TESTIMONY WITH SECRETARY. WITNESS STATEMENT FORMS  
ARE AVAILABLE IF YOU CARE TO SUBMIT WRITTEN TESTIMONY.

HOUSE OF REPRESENTATIVES  
VISITOR REGISTER

Natural Resources COMMITTEE BILL NO. SB 72  
DATE March 17, 1993 SPONSOR(S) J. Devlin

PLEASE PRINT

PLEASE PRINT

PLEASE PRINT

NAME AND ADDRESS	REPRESENTING	SUPPORT	OPPOSE
John Hanewald W.S.S.	Self	-	
<del>MARGARET BEER</del> Box 236 FER CLARK	" "	X	
Ralph Beer	Beer <del>Ralph Beer</del>		

PLEASE LEAVE PREPARED TESTIMONY WITH SECRETARY. WITNESS STATEMENT FORMS ARE AVAILABLE IF YOU CARE TO SUBMIT WRITTEN TESTIMONY.

HOUSE OF REPRESENTATIVES  
VISITOR REGISTER

Natural Resources

COMMITTEE

BILL NO.

SB 72

DATE

March 17, 1993

SPONSOR(S)

G. H. Devlin

PLEASE PRINT

PLEASE PRINT

PLEASE PRINT

NAME AND ADDRESS	REPRESENTING	SUPPORT	OPPOSE
MARK Simonich	DNR	X	
Rep Bill Rehbein		X	

PLEASE LEAVE PREPARED TESTIMONY WITH SECRETARY. WITNESS STATEMENT FORMS  
ARE AVAILABLE IF YOU CARE TO SUBMIT WRITTEN TESTIMONY.

HOUSE OF REPRESENTATIVES  
VISITOR REGISTER

Natural Resources COMMITTEE BILL NO. SB 196  
DATE March 17, 1993 SPONSOR(S) H. Newlin

PLEASE PRINT

PLEASE PRINT

PLEASE PRINT

NAME AND ADDRESS	REPRESENTING	SUPPORT	OPPOSE
Vivian Drake 316 N. Park, Helena	Lewis & Clark Cty		✓
<del>Tom</del> KEN POELMAN 8640 Poelman Manhattan	Holnam		✓
Dezzer Juy Three Forks	Holnam		✓
HOWARD HARMON 6617 W. DRY CK - MANHATTAN	HOLNAM		✓
SHARON DICKMAN 3995 TRIDENT RD THREE FORKS MT	HOLNAM		✓
Brandon Thurston Box 382 Three Forks MT	Holnam		✓
Deane Thurston Box 382 Three Forks	Holnam		✓
Ralph Dickman 3995 Trident Rd Three Forks	Holnam		✓
DARBY Prokop Box 1054 Three Forks	Holnam		X
Jim IRVINE Box 402 Manhattan	HOLNAM		✓
James Balke PO Box 382 Belgrade 59714	Holnam		X
Martha Vethkamp Box 232 Manhattan MT 59741	Holnam		X
Dick Deeg Box 741 Three Forks MT 59752	Holnam		X

PLEASE LEAVE PREPARED TESTIMONY WITH SECRETARY. WITNESS STATEMENT FORMS  
ARE AVAILABLE IF YOU CARE TO SUBMIT WRITTEN TESTIMONY.



HOUSE OF REPRESENTATIVES  
VISITOR REGISTER

Natural Resources

COMMITTEE

BILL NO.

SB 196

DATE March 17, 1993 SPONSOR(S)

H. Rowlin

PLEASE PRINT

PLEASE PRINT

PLEASE PRINT

NAME AND ADDRESS	REPRESENTING	SUPPORT	OPPOSE
Joe Steinbeissen Jr. HCR 80 Box 75 Lambert mt 59243	R#1 Box 3402 Sidney self	✓	
DAVE NATION BUTTE MT 59702	SRM INC.		✓
Nancy Mc Paffie	self SB 338	✓	
Ed Mc Paffie	self SB 338	✓	
Jean Riley	Petroleum Tank Release Compensation Board		✓
Famell VanHanson	Self SB 338	✓	
David Ross	Mt. Audubon Leg. Fund		✓
Gordon Darlington Three Forks	Self SB 338	✓	
Marion Darlington Three Forks	Self SB 338	✓	
John Geacht	DHES / LST		
Rep Bill Rehbein		✓	

PLEASE LEAVE PREPARED TESTIMONY WITH SECRETARY. WITNESS STATEMENT FORMS  
ARE AVAILABLE IF YOU CARE TO SUBMIT WRITTEN TESTIMONY.

HOUSE OF REPRESENTATIVES  
VISITOR REGISTER

Natural Resources COMMITTEE BILL NO. SB 196  
DATE March 17, 1993 SPONSOR(S) H. Devlin

PLEASE PRINT

PLEASE PRINT

PLEASE PRINT

NAME AND ADDRESS	REPRESENTING	SUPPORT	OPPOSE
<u>Tim Clark</u>	<u>MT Assn Realtors</u>	<u>X</u>	

PLEASE LEAVE PREPARED TESTIMONY WITH SECRETARY. WITNESS STATEMENT FORMS  
ARE AVAILABLE IF YOU CARE TO SUBMIT WRITTEN TESTIMONY.