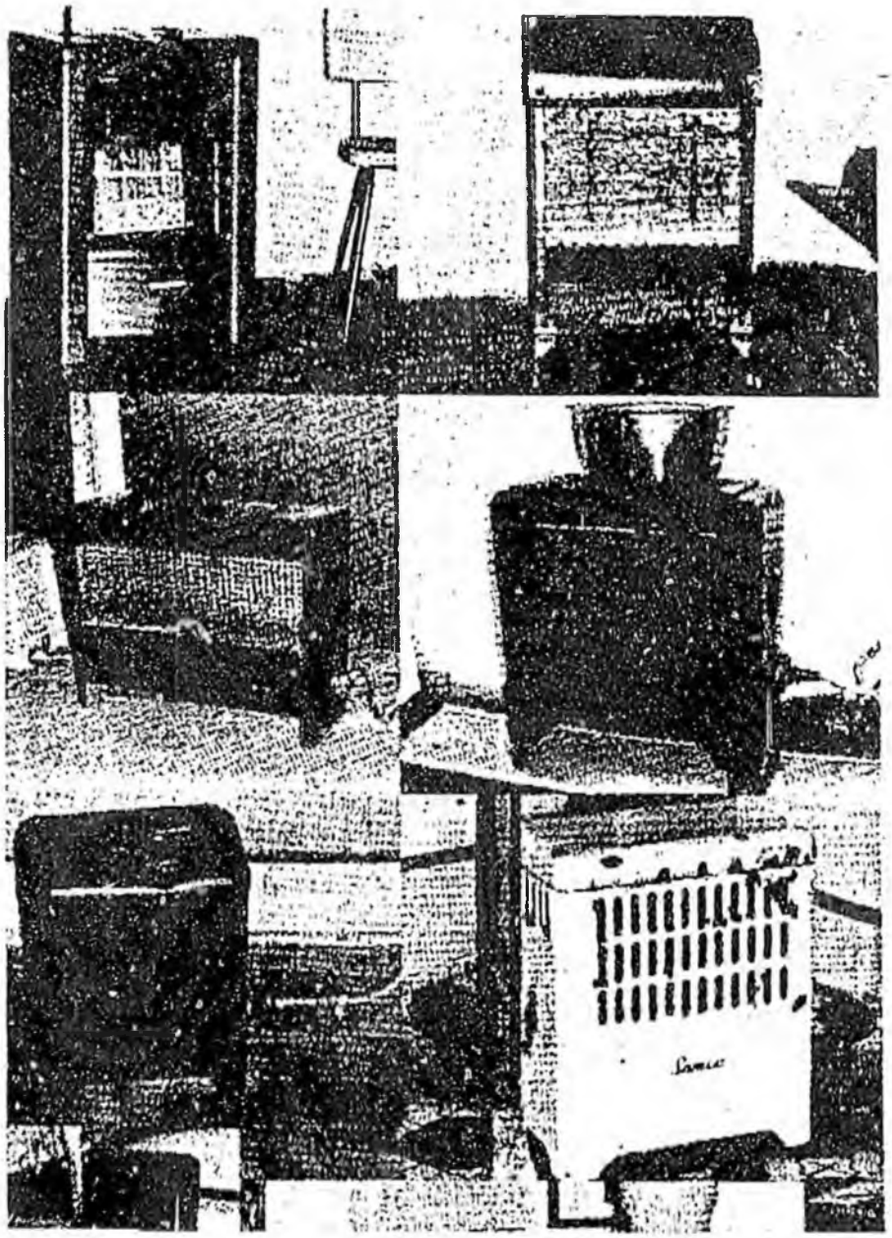
ALASKA LEGISLATURE COMMITTEE FILES 1993-1994 8672

8252 SENATE COMMUNITY & REGIONAL AFFAIRS - SHESS

Analysis of Space Heaters as a Possible Allowable Weatherization Measure



January 1991

ALASKA HOUSING
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heater is put into operation. In addition, common sense must be evident, and thorough instruction on space heater operation must be imparted to all occupants where portable space heaters are used.

Technical Specifications and Standards for Gas Space Heaters. The following ANSI standards apply to gas space heater equipment and installation[35-40].

ANSI Z21.11.1-81	Vented Gas-Fired Room Heaters
ANSI Z21.11.2-78	Unvented Gas-Fired Room Heaters
ANSI Z21.44-77	Direct Vent Gas-Fired Wall Heaters
ANSI Z21.48-79	Gas-Fired Floor Heaters
ANSI Z21.49-79	Vented Gas-Fired Wall Heaters
ANSI Z21.71-81	Automatic Pilot Ignition Systems - Field Installation
ANSI Z223.1	National Fuel Gas Code

The AGA conducts a laboratory testing program leading to certification of gas appliances and accessories, including gas space heaters. The purpose of this program is to assist consumers, local safety authorities and others in identifying those models of gas-using equipment that comply with ANSI standards, embodying reasonable concepts of safety, durability and performance, and are applicable to the equipment. Any advertising or display of an AGA mark on appliances or accessories is a representation that the equipment was in fact constructed to the design certified by the AGA laboratories. Recertification is required every calendar year[41].

Installation of Vented Space Heaters. According to ANSI Z223.1[35], it is recommended that space heaters installed in sleeping quarters or rooms generally kept closed be of the vented type, be connected to an effective flue or vent and be equipped with an automatic pilot. The certified designs of heaters are such that temperatures of adjacent combustible walls and surfaces will not be excessive when the heater is installed and used as specified in the manufacturer's instructions and on the marking plate. Certification assumes expected installation on wood floors.

Installation of Unvented Space Heaters. According to ANSI Z223.1[35], unvented heaters may not be installed in sleeping quarters, bathrooms or institutions such as homes for the aged, sanitariums, convalescent homes or orphanages. It should also be noted that the use of unvented space heaters in residences is illegal in California, New York, Arizona and Massachusetts. Unvented heaters require fresh air openings into the room in which the heater is installed. Certified designs for these heaters follow the same guidelines as those for vented heaters, except for those designed and marked for installation in incombustible fireplaces only.

Environmental Considerations

Combustion Products and Concentrations in Indoor Air. Indoor air pollution due to emissions from unvented gas-fired space heaters has been the subject of several research studies[31-36]. The primary indoor air pollutants identified as resulting from gas combustion in unvented space heaters are carbon monoxide (CO), carbon dioxide (CO_2), nitrogen oxide (NO_x), formaldehyde (HCHO) and submicron-size suspended respirable particles. Unburned hydrocarbons (fuel) have also been found, as well as a depletion of oxygen concentration in the heated space.

Table A-6 presents the averaged results of a GRI study on nine new unvented gas space heaters[31]. Among the nine, five were natural gas-fired heaters, four equipped with infrared tile burners and one with a blue-flame burner with ceramic radiating tile inserts. Four were propane gas-fired heaters, one equipped with an infrared tile burner and three equipped with blue-flame burners and ceramic radiating tile inserts. Pollutant concentrations are measured in pounds of pollutant emitted per million Btu of thermal energy consumed.

TABLE A-6

Pollutant Emissions (Pounds Per Million Btu) of Gas Space Heaters

Pollutant	Natural Gas		Propane	
	Blue Flame	Infrared	Blue Flame	Infrared
Nitrogen Dioxide (NO_2)	0.0300	0.0115	0.0315	0.0138
Nitrogen Oxide (NO)	0.0414	0.0008	0.0638	<0.0001
Carbon Monoxide (CO)	0.0667	0.1134	0.0441	0.1006
Formaldehyde (HCHO)	0.0007	0.0017	0.0010	0.0026
Particulates	0.0148	0.0008	0.0008	0.0003

Flue gas pollutant concentrations vary among heaters and also depend on burner tuning. A properly tuned burner will emit less CO and unburned hydrocarbons, but will generally emit more NO, than a poorly tuned burner.

The actual concentration of pollutants in a heated space is a function of the air change rate of the room being heated[34]. Table A-7 summarizes data from one study conducted to determine the effect of air change rate on indoor air pollutant

concentrations, along with "levels of concern" as determined by the World Health Organization (WHO).

New construction in Alaska is close to this level (up to ~.5 ACH).

TABLE A-7

Effect of Air Change Rate on Indoor Air Pollutant Levels for a Gas Space Heater

Pollutant/Gas	1.14 Air Changes/Hour	0.36 Air Changes/Hour	WHO Concern Levels
Carbon Dioxide (CO_2)	1,930 ppm	11,100 ppm	6,800 ppm
Carbon Monoxide (CO)	1.0 ppm	26 ppm	27 ppm
Nitrogen Dioxide (NO_2)	0.4 ppm	1.46 ppm	0.18 ppm

TOO HIGH FOR ALL

Typically, newly constructed residential structures have between .5 and 1 air changes per hour. The American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) standards recommend a minimum of .35 air changes per hour as a design condition for residential structures. Older houses and those that are not well insulated tend to have higher air change rates, although this should not outweigh the obvious need for adequate room ventilation if indoor air pollutant levels are to be minimized[37-40].

Health Effects of Gas-Heater-Produced Indoor Air Pollutants. Based on a review of available literature, the most extensively studied health risk associated with gas space heater emissions is that associated with CO[41,42]. Estimates from a Consumer Products Safety Commission study are that an average of 170 people die every year from CO poisoning associated with both vented and unvented gas space heaters[41]. CO binds with the hemoglobin in red blood cells in the same manner as oxygen does. This prevents sufficient oxygen uptake by the blood, and asphyxiation occurs if CO levels become too high. Long-term exposure to low levels of CO can cause damage to the central nervous system, the cardiovascular system, and the liver. It is also responsible for reduced learning ability in children.

NO_x pollutants are also toxic by inhalation[43,44]. They are a strong irritant to mucous membranes, and long-term exposure to low level concentrations can cause chronic respiratory illness[43], as well as stress on the cardiovascular system. Aldehydes such as HCHO are also irritants, and in higher concentrations (above 1 ppm) can cause headache, dizziness, nausea, coughing, chest constriction, and rapid heartbeat. Unburned hydrocarbons (fuel) and combustion products adsorbed onto respirable particulates can be toxic, and sometimes carcinogenic.

Excessive CO_2 does not have acute toxic effects in the concentrations typically found in rooms with unvented heaters. However, long-term exposure to high CO_2 concentrations (as well as low O_2 concentrations) can gradually deprive the body of sufficient oxygen and cause headaches, dizziness and loss of coordination.

Methods to Reduce Indoor Air Pollutant Levels from Unvented Space Heaters. Precise tuning of the burner air-to-fuel ratio is very important to reduction of CO emissions. If insufficient air (oxygen) enters into the combustion process, incomplete combustion will occur and a higher than acceptable proportion of CO will be produced, instead of CO_2.

The most direct method of reducing NO_x emissions is the reduction of flame temperature by insertion of ceramic or metallic screen material in the flame[40]. This is a potentially low-cost and simple method to apply. However, one potential drawback to reducing flame temperature is that CO emission levels may increase.

Methods to Reduce Indoor Air Pollutant Levels from Vented Space Heaters. Although vented gas heaters in proper working condition pose few problems for indoor air quality because combustion byproducts are vented outdoors, pollutants could be released indoors if certain mechanical difficulties exist in the flue pipe and heat exchanger that can cause exhaust gas backflow or leakage. It is advisable to perform periodic checkups and preventative maintenance on these components, with particular emphasis on the following:[24]

(1) Flue pipe - Check for and repair leaks and obstructions.

(2) Heat exchanger - Check for and repair cracks.

In addition to these measures, those discussed above for unvented heaters would be appropriate as well.

Moisture and Condensation Resulting from Gas Heater Operation. Although not generally considered a pollutant, a considerable quantity of water vapor is produced as a result of the oxidation of the hydrogen in fuel. Table A-8 shows the amount of water (liquid) produced per million Btu of fuel consumed for the components of natural gas and liquified petroleum gas.

TABLE A-8

Water Produced Per Million Btu of Fuel Consumed	
Fuel	Gallons of Water per Million Btu
Methane (natural gas)	11
Ethane (natural gas)	10
Propane (LPG)	9
Butane (LPG)	9

For a typical gas space heater rated at 30,000 Btu per hour, roughly one-third of a gallon of water (liquid equivalent) will be produced per hour. This is not a serious issue for vented heaters. However, for an unvented heater, considerable moisture will be accumulated in the heated space, and condensation may be a problem. Condensation becomes increasingly more severe as the outdoor temperature grows colder because more fuel is burned to maintain indoor comfort level, because wall surfaces upon which condensation can occur are cooler, and because occupants increase efforts to reduce outdoor air infiltration, an action that allows more moisture to remain in the heated space. Condensation also wets the insulation in a building, reducing its R-value. Condensation may cause dry rotting of window sills, structural parts, roof deck, etc.

PREFERRED
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FAX: 907-283-7990

April 14, 1994

Mr. Randy Phillips
Alaska State Legislature
State Capitol (MS 3100) Rm. 103-C
Juneau, Alaska 99801-1182

Re: HB#543

Dear Legislator:

I am opposed to the passage of the above referenced Bill, "An Act Relating to Unvented Gas Heaters in Residential Buildings".

If a house is built to today's energy standards, an unvented heater burns oxygen out of the inside air and these houses are so air tight that life could be endangered. If this Bill were to pass, as a Mechanical Contractor licensed with the State of Alaska, I would never install an unvented heater because of the liability.

Respectfully yours,

Preferred Plumbing & Heating

RGS:ble

ENERGY DESIGN ASSOCIATES, INC.

April 14, 1994

Senator Randy Phillips
Alaska State Legislature
State Capitol MS 3100
Juneau, AK 99801-1182

Dear Senator:

People will die. Unvented space heaters indoors will do this. Proposed House Bill No. 543 (STA) attempts to override building codes already in place preventing this tragedy. The proposed bill's aim is to specifically allow unvented space heaters in houses.

Unvented space heaters produce carbon monoxide. Low concentrations makes people sick. Higher concentrations kill. Alaska already has the highest carbon monoxide deaths per capita than any other state. Senator, do you want to be a part of a record breaking death toll?

In addition to carbon monoxide, these heaters produce nitric oxides. These gases damage lung tissue. And the damage is permanent.

Especially vulnerable to carbon monoxide and nitic oxides are children and the elderly. They are counting on you to do the right thing.

Finally, unvented space heaters produce a pound of water as a by-product for every pound of fuel burned. I am sure your own experiences tell you we don't need any more moisture condensation problems in our houses.

Current home ventilation systems are not designed to provide ventilation air for people and unvented space heaters. Opening windows is not an option. Would you open a window in Fairbanks or Barrow in the winter? This is exactly when such heaters will be used.

Please Senator Phillips, do not pass this Bill.

Sincerely,

Stuart D. Brooks

Stuart D. Brooks
President

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James E. Murphy, Executive Direct
Shannon R. Jones, Preside

AMERICAN LUNG ASSOCIATION of ALASKA

Dedicated to the conquest of lung disease and the promotion of lung health

April 18, 1994

Dear Legislator,

RE: OPPOSITION TO HB 543, UNVENTED GAS HEATERS

The American Lung Association of Alaska (ALAA) would like to express strong and consistent opposition to HB 543, a bill that would permit unvented gas space heaters in residential buildings.

ALAA's mission is *"Dedicated to the conquest of lung disease and the promotion of lung heath"* and ALAA has been a leader to improve indoor air quality in Alaska. To that end, we are convinced that HB 543 will not only DECREASE indoor air quality, but will indeed INCREASE the health risk for Alaskans who may use these devices.

WE STRONGLY ENCOURAGE THAT HB 543 NOT BE PASSED.

A few specific comments:

- Alaska has the highest per capita death rate from carbon monoxide (CO) poisoning in the country (1990 study by the Journal of the American Medical Association), and we again saw possible death during the 1994 Iditarod from CO poisoning. And while the heating device used during the Iditarod was not designed to be used unvented, this illustrates the lack of correct operational knowledge of heating sources that is of great concern to ALAA. CO is a colorless, odorless gas that can kill too often. We will not support any action that will increase the likelihood of increased CO poisonings.

- Alaska has wisely adopted the Uniform Building Code which prohibits such devices, and feel that these standards should not be changed in cold climate regions. They are prohibited in other severe weather climates such as Minneapolis, New Hampshire and New York State.

- These unvented heaters have a device which will shut it off when the supply of oxygen drops to 18%. However, these oxygen depletion sensing devices are not CO detectors. Burning of fuel with insufficient oxygen is one source of CO and a space heater could have sufficient oxygen and still produce unacceptable levels of CO because it was improperly installed or dirty.

- If these devices are properly installed and maintained, they do not pose a health risk. However, these heaters must be installed in a well ventilated area that has access to an

outside source. Due to our severe weather in Alaska, this is not the case. Is it really reasonable to expect that Alaskans will open a window or provide a hole 5" X 6" (for a 30,000 BTU device) in the dead of winter to allow for the recommended ventilation? This would rob the home of the heat generated by this device?

- The directions specify that for safe operation (which indeed is possible) the device must be cleaned annually. The devices can malfunction if they are not properly maintained, the burner gets dirty, or if the automatic shut off is bypassed. The directions for one of these heaters says that "more excessive cleaning may be required due to lint from carpeting, bedding material, etc... It is imperative that control compartment, burners and circulating air passageways of the appliance be kept clean." Such improper maintenance will increase the health risks. This lack of ongoing correct maintenance is one of ALAA's greatest concerns.

- These devices are approved only as a secondary source of heat - a point which is not clear in the instructions. Due to the high cost of electricity, it is very reasonable to assume that they will be used as the primary heat source, and thus increasing the health risk.

- These devices should not be installed in sleeping quarters or bathrooms, but the homeowner will have to purchase the device and read the directions before learning this. It is expected that many of these devices will be installed improperly in cabins and spaces too small for their safe operation.

- As with any issue, there are many additional factors to be considered, including the amount of water vapor that will be released inside the dwelling, potential problems with initial installation, lack of access to fresh air for combustion, etc.

- We understand the appeal of these devices, however we also feel that these devices will have an adverse effect on the long term health of Alaskans.

In summary, while these unvented devices have a place, the Uniform Building Code should NOT be amended to allow their use in Alaska. We encourage you to NOT pass HB 543.

Please feel free to contact me if you have any questions.

Sincerely,

James E. Murphy
Executive Director
American Lung Association of Alaska

\HB543-1.Mem

David A. Webb
2664 Seclusion Drive
Anchorage, Alaska 99504

April 13, 1994

Senator Randy Phillips
Alaska State Legislature
State Capitol (MS3100)
Juneau, Alaska 99801-1182

Re: CSHB 543(STA) Unvented Gas Space Heaters

Dear Randy:

I just learned that this bill has passed the House and has been sent to the Senate. I encourage you not only to vote against this measure but also to soundly cause its defeat.

I have been in the gas heating and appliance business for 29 years. Experience has taught me that unvented heaters are dangerously unsafe in this climate because our buildings are too tight to provide adequate combustion air plus dilution of the products of combustion. These units were designed to be used in "well ventilated areas" only. According to the manufacturers installation instructions, windows should be opened "1 or 2 inches" during operation. People do not leave windows open in Alaska.

These particular heaters are designed with an oxygen depletion sensor (ODS) to shut off the unit if the oxygen level in the surrounding atmosphere is reduced from standard 20% to about 18%. However, if no one is home when the unit shuts off, the building will freeze up. If someone is home, a window or door can be opened to clear the air enough to re-ignite the heater for a while longer. However, there is a limit to how many times the heater will go off when it's cold out before the operator bypasses the safety. Recently, I had occasion to examine one of these units and it took me about 30 seconds to disable the oxygen depletion sensor with a paperclip! Once the safety is disabled and the oxygen level falls, the heater will produce carbon monoxide resulting in illness or death of the building occupants.

The problem is compounded by the fact that a major product of combustion is water vapor. We have all been in a camper or motorhome when snow from boots and coats melted to the point where the air inside was wet--warm, but wet enough that our gear would barely dry. This excess moisture (humidity) freezes and ices over the cracks around windows and doors, further reducing air infiltration. In the case of the camper, the condition is safe because combustion air from outside is supplied directly to the burner through a duct designed into the heater. The heater is also vented outside so the products of combustion cannot cause additional air fowling.

The two appealing features of unvented heating equipment are that they are cheap (inexpensive) and they are 100% fuel efficient. However, these "advantages" are at the expense of safety. Additional efficiency is not gained if the operator has to leave a window open to use the heater. Since safe, 80%efficiency, vented units are readily available, these unvented features are disadvantages in cold climates.

Unvented heaters equipped with the oxygen depletion devices are probably safe in mild climates where windows can be cracked to allow proper ventilation, but they certainly do not belong in Alaska. To allow installation in this climate would be a public disservice. People who are not in the heating/ventilation business do not realize the danger of this type equipment to themselves and their families.

I urge you to vote no on this issue. The proper place for this bill is in the round file under your desk.

Regards,

David A. Webb
2664 Seclusion Drive
Anchorage, AK 99504

cc: Rick Hlford
Al Adams
Loren Leman
Robin Taylor
Fred Zharoff

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April 14, 1994

Ms. Gail Phillips
Alaska State Legislature
State Capitol (MS 3100) Rm.216C
Juneau, Alaska 99801-1182

Re: HB#543

Dear Legislator:

I am opposed to the passage of the above referenced Bill, "An Act Relating to Unvented Gas Heaters in Residential Buildings".

If a house is built to today's energy standards, an unvented heater burns oxygen out of the inside air and these houses are so air tight that life could be endangered. If this Bill were to pass, as a Mechanical Contractor licensed with the State of Alaska, I would never install an unvented heater because of the liability.

Respectfully yours,

Preferred Plumbing & Heating

RGS:blc

R-S PLUMBING & HEATING

12812 Old Glenn Hwy. • Eagle River, AK 99577
Fire Lake Plaza
694-6646

April 14, 1994

Senator Randy Phillips

Reg: House Bill #543 - Unvented Gas Heaters

Dear Senator;

As a member of the Mechanical and Plumbing Industry, I have a serious concern about the above mentioned bill.

Unvented gas heaters can pose a hazard of carbon monoxide poisoning, putting the public at great risk if this becomes Law.

Thank you for your attention..

Sincerely,

Robert Beesing
Owner
R & S Plumbing & Heating

4/15/94

Senator Rick Halford
Alaska State Legislature Rm. 111-C
State Capitol (MS3100)
Juneau, Alaska 99801-1182

RE: Amendment to, AS18.56.300(e)

Dear Rick,

It has come to my attention that the Senate is considering amendments to the above mentioned Statute concerning the approval of unvented gas heaters for installation in residences. If adopted the Statute would allow under Sec. 18.60.900, the installation of unvented gas space heaters in any residence, if installed in accordance with Manufactures installation instructions.

The Uniform Mechanical Code disallows this type of installation for reasons of extreme danger in the operation of this type of equipment. Alaska now leads the nation in deaths resulting from carbon monoxide poisoning. If allowed to pass this Statute, I am convinced, would add tragically to that statistic.

In my business I do not always agree with the Codes that are adopted, but in this case I am fully behind the Uniform Mechanical Code. In Alaska we are building tighter houses for good reason, to save on the fuel costs of operating the home. This trend as set forth in the State Energy Standard is accomplishing the desire for low fuel costs but the other side of the story is a potential danger if the ventilation needs are not met. I frequently find ventilation openings closed and homes configured in a dangerous manor. This is due to a lack of home owner understanding of the need for combustion air and the balance needed for clean burning equipment. The unvented gas heaters are a step backward in this problem. Until a fail safe method is devised for the operation of this type of equipment I am convinced that it should not be allowed to be installed.

In all the literature I have been exposed to, the factory requirement for installation is to disallow the unit in "sleeping quarters". There is no definition in the UMC for sleeping quarters. In Webster's it states that quarters are "Lodgings: place of abode". In my interpretation a Sleeping Quarters then is a residence which would preclude the installation in any residence.

Please consider very carefully your decisions concerning this amendment. If I thought it would be in any way beneficial I would not have such a firm resolve.

Sincerely,

Chuck Renfro, owner

cc: Ramona Barnes
Randy Phillips

18720 Talarik Drive
Eagle River, AK 99577

April 18, 1994

Senator Randy Phillips, Chairman
Senate Standing Committee, Community and Regional Affairs
Alaska State Legislature
State Capitol (MS 3100)
Juneau, AK 99801-1182

RE: House Bill 543

Randy:

It is my understanding that the Senate Community and Regional Affairs Committee will be considering action on House Bill 543, in the very near future. House Bill 543 amends the Uniform Mechanical Code adopted by the Department of Public Safety under AS 18.70.080 to allow the installation of unvented gas space heaters in residential buildings. It is my opinion that passage of this legislation may put the public at significant risk.

As you know, I am employed by ENSTAR Natural Gas Company. However, I am writing you not as a gas company employee, but rather as a constituent. I have a personal concern for the safety and the welfare of our community as well as for the public in general.

Unvented gas space heaters rely on the air in the living space to provide oxygen for combustion. As the space heaters burn the gas, water vapor and carbon dioxide (CO_2) are produced as by products of combustion. In the tightly constructed Alaskan homes, air is replaced very slowly. This allows the CO_2 and the water vapor to accumulate and the oxygen to be depleted. As the oxygen level drops, and the heater continues to burn, the byproducts of combustion are no longer water vapor and CO_2 but water vapor and *carbon monoxide* (*CO*). Carbon Monoxide, as we all know, is life threatening in confined spaces.

The unvented gas space heaters, with which I am familiar, do have an oxygen depletion sensor. Still, there is no way to assure that the sensors are fail safe. If an oxygen depletion sensor fails, the results may be tragic. Additionally, the oxygen depletion sensor is easily bypassed. I can foresee a cold Alaskan night where the space heater, running all evening, shuts down because the oxygen in the room has been depleted. The unsuspecting home owner, concerned with the lack of heat, bypasses the sensor and goes to bed. The unvented gas space heater continues to operate, producing CO..... I don't know what more I can say.

Randy, please don't let this legislation become law.

Respectfully,

Bob

Robert R. Jensen

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April 18, 1994

Senator Randy Phillips
Chairman Senate Committee on C&RA
Alaska State Legislature
State Capitol
Juneau, Alaska 99801-1182

Dear Senator Phillips:

I am writing to you today to express my deep concern for the residents of Alaska and their safety. I am referring to HB No. 543 that deals with the allowance of the installation of unvented space heaters in a residence. This is contrary to the Uniform Mechanical Code Section 807 subsection c. The codes are put in place to protect occupants from improper installations and thereby save their lives from possible carbon monoxide poisoning. This bill would jeopardize the lives of hundreds of Alaskans, by permitting both unscrupulous and unknowledgeable people to install unvented space heaters in what in the winter in Alaska are poorly ventilated residences.

I urge your defeat of this bill and recommend that this bill never see the light of day so that Alaskans in the future will be able to see the light of another day.

Timothy M. Sullivan
Executive Director

cc: Senator Al Adams
Senator Loren Leman
Senator Robin Taylor
Senator Fred Zharoff

P.O. Box 770443
Eagle River, AK 99577

Senator Randy Phillips, Chairman
Senate Standing Committee, Community and Regional Affairs
Alaska State Legislature
State Capitol (MS 3100)
Juneau, AK 99801-1182

RE: House Bill 543

Randy:

It has come to my attention that the Senate Community and Regional Affairs Committee will be considering action on House Bill 543, in the near future. House Bill 543 amends the Uniform Mechanical Code adopted by the Department of Public Safety under A.S. 18.70.080 to allow the installation of unvented gas space heaters in residential buildings. I believe that such a code change may put the public at significant risk.

You are well aware that I am and have been employed by Enstar Natural Gas Company for over twenty years. During that time I have seen and heard of numerous carbon monoxide poisonings and a few untimely deaths as a result of equipment malfunctions, usually caused by do-it-yourselfers, from heating equipment which is inherently safer than the gas fired unvented space heater. I am, however, writing you not as a gas company employee, but rather as a personal friend and former constituent. My experiences give reason for personal concern for the safety and health of the people in our communities.

Normal oxygen content in the atmosphere is 20.9% or 209,000 parts per million (PPM). Carbon monoxide (CO), at levels of 100 PPM, which is .04% or .0004 can cause severe health problems to the human body. (As you can see, only a very small amount of CO in the atmosphere can be potentially life threatening.)

Unvented gas space heaters rely on the air in the room to provide oxygen for combustion. As the space heaters burn the gas and air, carbon dioxide and water are produced as by-products of combustion. In the tightly constructed homes in Alaska, air is not replaced quickly. As oxygen levels drop, and the heater continues to burn (less effectively), the by-products can become water and carbon monoxide (a result of this incomplete combustion).

The unvented gas space heaters, which I am familiar with, do have oxygen depletion sensors. There is no guarantee, however, that these oxygen sensors will not fail to operate as designed. If an oxygen sensor fails the end result could be tragic. Heres another thought. Its a cold winters night in Alaska, the unvented space heater shuts down as its designed to due to a lack of oxygen. The worried homeowner, in an attempt to keep his house from freezing up, bypasses the oxygen sensor, relites the space heater and goes to bed. The unvented gas space heater now continues to burn up more oxygen and produce more CO.

Randy, the only thing that should die, is this bill in committee.

Sincerely,

Bruce V. Zmuda

Bruce V. Zmuda

SUPERIOR
Plumbing and Heating, Inc.
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ANCHORAGE, ALASKA 99507

MECHANICAL CONTRACTORS

April 18, 1994

Alaska State Legislature
State Capitol (MS 3100)
Juneau, Alaska 99801-1182

Attention: Senator Rick Halford -
Senate President

Dear Senator:

It has come to my attention that Housebill #543(STA) regarding unvented gas space heaters in residential buildings has been introduced. We should not need a bill for this issue. A simple amendment to the code would suffice. Except few if any of the people knowledgeable about this subject would support such amendment because every year some people in Alaska die from CO-poisoning. I think we should leave the life safety codes as they are and not override sections with special interest bills.

Yours Sincerely,

Jan Van Den Top - P.E.
JVDT/lmf

P.O. Box 770443
Eagle River, AK 99577

Senator Randy Phillips, Chairman
Senate Standing Committee, Community and Regional Affairs
Alaska State Legislature
State Capitol (MS 3100)
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Post-It™ brand fax transmittal memo 7671	# of pages ▸ 1
To RANDY PHILLIPS	From BRUCE ZMUDA
Co.	Co.
Dept.	Phone #
Fax #	Fax #

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You are well aware that I am and have been employed by Enstar Natural Gas Company for over twenty years. During that time I have seen and heard of numerous carbon monoxide poisonings and a few untimely deaths as a result of equipment malfunctions, usually caused by do-it-yourselfers, from heating equipment which is inherently safer than the gas fired unvented space heater. I am, however, writing you not as a gas company employee, but rather as a personal friend and former constituent. My experiences give reason for personal concern for the safety and health of the people in our communities.

Normal oxygen content in the atmosphere is 20.9% or 209,000 parts per million (PPM). Carbon monoxide (CO), at levels of 100 PPM, which is .04% or .0004 can cause severe health problems to the human body. (As you can see, only a very small amount of CO in the atmosphere can be potentially life threatening.)

Unvented gas space heaters rely on the air in the room to provide oxygen for combustion. As the space heaters burn the gas and air, carbon dioxide and water are produced as by-products of combustion. In the tightly constructed homes in Alaska, air is not replaced quickly. As oxygen levels drop, and the heater continues to burn (less effectively), the by-products can become water and carbon monoxide (a result of this incomplete combustion).

The unvented gas space heaters which I am familiar with, do have oxygen depletion sensors. There is no guarantee, however, that these oxygen sensors will not fail to operate as designed. If an oxygen sensor fails the end result could be tragic. Heres another thought. Its a cold winters night in Alaska, the unvented space heater shuts down as its designed to due to a lack of oxygen. The worried homeowner, in an attempt to keep his house from freezing up, bypasses the oxygen sensor, relites the space heater and goes to bed. The unvented gas space heater now continues to burn up more oxygen and produce more CO.

Randy, the only thing that should die, is this bill in committee.

Sincerely,

Bruce V. Zmuda

Bruce V. Zmuda

18720 Talarik Drive
Eagle River, AK 99577

April 18, 1994

Senator Randy Phillips, Chairman
Senate Standing Committee, Community and Regional Affairs
Alaska State Legislature
State Capitol (MS 3100)
Juneau, AK 99801-1182

RE: House Bill 543

Randy:

It is my understanding that the Senate Community and Regional Affairs Committee will be considering action on House Bill 543, in the very near future. House Bill 543 amends the Uniform Mechanical Code adopted by the Department of Public Safety under AS 18.70.080 to allow the installation of unvented gas space heaters in residential buildings. It is my opinion that passage of this legislation may put the public at significant risk.

As you know, I am employed by ENSTAR Natural Gas Company. However, I am writing you not as a gas company employee, but rather as a constituent. I have a personal concern for the safety and the welfare of our community as well as for the public in general.

Unvented gas space heaters rely on the air in the living space to provide oxygen for combustion. As the space heaters burn the gas, water vapor and carbon dioxide (CO_2) are produced as by products of combustion. In the tightly constructed Alaskan homes, air is replaced very slowly. This allows the CO_2 and the water vapor to accumulate and the oxygen to be depleted. As the oxygen level drops, and the heater continues to burn, the byproducts of combustion are no longer water vapor and CO_2 but water vapor and *carbon monoxide (CO)*. Carbon Monoxide, as we all know, is life threatening in confined spaces.

The unvented gas space heaters, with which I am familiar, do have an oxygen depletion sensor. Still, there is no way to assure that the sensors are fail safe. If an oxygen depletion sensor fails, the results may be tragic. Additionally, the oxygen depletion sensor is easily bypassed. I can foresee a cold Alaskan night where the space heater, running all evening, shuts down because the oxygen in the room has been depleted. The unsuspecting home owner, concerned with the lack of heat, bypasses the sensor and goes to bed. The unvented gas space heater continues to operate, producing CO..... I don't know what more I can say.

Randy, please don't let this legislation become law.

Respectfully,

Robert R. Jensen

ALASKA HEALTH PROJECT
Information and Advocacy on Occupational and Environmental Health

19 April 1994

Senator Randy Phillips, Chairman
Senate Standing Committee - Community and Regional Affairs
Alaska State Legislature
State Capital (MS 3100)
Juneau, AK 99801-1182

RE: Opposition to HB 543, Unvented Gas Heaters

The Alaska Health Project (AHP) would like to express strong and consistent opposition to HB 543, a bill that would alter the Uniform Building Code to allow unvented gas space heaters in residential buildings in the state of Alaska.

The Alaska Health Project is dedicated to providing information on health, safety and is a strong advocate and resource for indoor air quality issues in the Alaska. AHP is convinced that HB 543 will not only decrease indoor air quality in those homes these units are installed but also lead to increases in health associated symptoms and possibly fatalities if these units are not properly installed, monitored and maintained.

The Alaska Health Project emphatically encourages that HB 543 not be passed and the following are some distinct reasons.

Unvented space heaters produce Carbon monoxide. Low concentrations of CO causes people to become ill. High concentrations can result in asphyxiation and death. This was almost the result during the Iditarod Sled Dog Race this year, (produced by an unvented space heater.) Alaska already has the highest CO death rates in the Union, passage of this bill would almost assure that honor or disgrace each and every year.

In addition to Co, the combustion process also produces nitric oxides. NOx cause damage, irritation to lung tissue and contribute to pulmonary edema.

These unvented space heaters produce a pound of water vapor as a by-product of combustion for every pound of fuel consumed. This addition of moisture only increases the condensation problems which may already be present or create one that didn't exist.

Alaska has wisely adopted the Uniform Building Code which prohibits such devices, and these standards should not changed in cold climate regions. State such as Minnesota, New Hampshire, and New York also prohibit these appliances.

1818 West Northern Lights Blvd., Suite 103, Anchorage, Alaska 99517
(907) 276-2864 Outside Anchorage (800) 478-2864 Fax (907) 279-3089

These unvented heaters have a device which will shut off the unit when the supply of oxygen drops to 18%. The Occupational Safety and Health Administration (OSHA) has a minimum requirement of 19.5% oxygen for workers. However, these oxygen depletion sensing devices are not CO detectors. The Burning of fuel with insufficient oxygen is one source of CO and a space heater could still be supplied with adequate oxygen and still produce CO because it was improperly installed or maintained.

If these appliances are properly installed and maintained, they do not pose a health risk. However, these heaters must be installed in a well ventilated area that has access to a source of combustion/makeup air. Due to the severe weather in Alaska, this is not always the case. Is it reasonable to believe that someone will open a window or provide a 5"x 6" hole in the dead of winter to allow for the recommended ventilation. This would allow for a draft, the unwelcome invitation of cold outside air into the home and thereby defeating the purpose of this heater.

The directions specify that for safe operation (which is possible) the appliance must be maintained and cleaned annually. These appliances can malfunction if they are not properly maintained, the burner unit gets dirty, or if the automatic shut off switch is bypassed, as could most likely happen in the rural areas of the state.

These devices are approved only as secondary heat sources - a point which is not clear in the instructions. Due to the high cost of electricity, it is very reasonable to assume that they will be used as the primary source of heating.

These appliances should not be installed in sleeping areas or bathrooms. It is expected that many of these units will be improperly installed in remote cabins and spaces to small for safe operation.

The Alaska Health Project understands the consumer appeal of these appliances, however, we also feel that these appliances can have an adverse effect on the safety and health of Alaskans.

In closing, while these unvented space heater appliances may have a place, the Uniform Building Code should NOT be amended to allow their use in Alaska.

AHP strongly encourages you NOT to pass HB 543.

Sincerely,

Thomas N. Brudnicki

Thomas N. Brudnicki, REHS
Industrial Hygienist
Alaska Health Project

cc: Senators Loren Leman, Rick Halford

MUNICIPALITY OF ANCHORAGE
Municipal Manager's Office
Post Office Box 196650
Anchorage, Alaska 99519-6650
(907) 343-4433

TELECOPIER COVER LETTER
TELECOPIER NUMBER: (907) 343-4110

DATE: 4/20/94

FAX NUMBER: 465-4979

TOTAL NUMBER OF PAGES: 3 (including cover letter)

TO: Shirley Armstrong for Senate Comm. & Regional Affairs Committee

FROM: DAN MOORE, M.O.A.

PHONE NUMBER: 343-4282

COMMENTS:

Please distribute MOA's comments to all committee members prior to tomorrow morning's C&RA committee meeting.

Thanks for your help.

—Dm

FAX\COVERLTR

Municipality of Anchorage

P.O. BOX 196650
ANCHORAGE, ALASKA 99519-6650
TELEPHONE: (907) 343-4431
FAX: (907) 343-4991

Tom Fink, Mayor

OFFICE OF THE MAYOR

April 20, 1994

The Honorable Randy Phillips, Chairman
Senate Community and Regional Affairs Committee
Alaska State Capitol
Juneau, AK 99801

Dear Senator Phillips:

I have been informed that CSHB 543(STA) is scheduled for a teleconference tomorrow morning. The Municipality opposes this bill because of the serious potential health risks associated with allowing unvented gas space heaters in residential buildings. To clarify our opposition to the bill, I am providing the Committee with attached written comments prepared by Dr. Mary Ellen Gordian of the Municipality's Department of Health and Human Services. These comments cite a number of specific health risks that could occur if this bill were passed (see attachment).

I regret that due to a scheduling conflict, Dr. Gordian will be unable to participate in tomorrow's teleconference. Nonetheless, I request that the Municipality's comments be distributed to all Committee members prior to tomorrow's meeting, so that our concerns over the health implications of CSHB 543 (STA) are known.

Should the Committee require any additional information, please contact Dr. Gordian directly 343-6718.

Sincerely,

Tom Fink

Tom Fink
Mayor

legis\ltf20

Tom Fink,
Mayor

Municipality of Anchorage

Department of Health and Human Services
825 "L" Street
P.O Box 196650 Anchorage, Alaska 99519-6650

April 18, 1994

House Bill 543 seeks to change the building code to allow unvented gas space heaters in residential buildings. Unvented gas heaters should not be allowed for the following reasons:

1) Carbon monoxide builds up with any combustion process. It has a high affinity for the hemoglobin in blood cells. One can be overcome by carbon monoxide before there is any measurable reduction in oxygen levels in air.

2) Combustion heaters also give off nitrogen dioxide, a respiratory irritant, and volatile organic chemicals. Without venting these air pollutants become concentrated in the indoor air. Studies show that most people spend 90% of their time indoors. It is the most susceptible groups-the young, the elderly, and the infirm-who spend the greatest amount of time indoors.

4) Non-combustion electric space heaters that do not require ventilation are available. All combustion heaters NEED ventilation including those specified in HB543 as stated in their package insert.

3) The package insert says that these heaters require 1 square inch of ventilation for every 1000 BTU. Alaska homes are generally well-insulated. Ventilation would have to come from open windows, not likely in Alaska in the winter.

5) People will not open their windows in the winter to achieve that ventilation, because they cannot see or smell carbon monoxide.

Prepared by

Mary Ellen Gordian

Mary Ellen Gordian, MD, MPH
Medical Officer

ATTACHMENT

CITY OF PALMER

231 W. EVERGREEN AVE
PALMER, ALASKA 99645

Phone (907) 745-3271

A HOME RULE CITY

April 20, 1994

The Honorable Randy Phillips, Chairman
Senate Community and Regional Affairs Committee
Alaska State Legislature
State Capitol (MS3100)
Juneau, AK 99801-1182

RE: HB543 (STA), An Act relating to unvented gas space heaters

Dear Senator Phillips:

The effect of House Bill 543 is to modify an internationally recognized standard (the Uniform Mechanical Code) for heating equipment, bypassing the experience and judgment of code enforcement personnel. In the past, other national organizations have written standards allowing for the use of equipment or materials that had not been adequately tested. You may remember the problems and subsequent recall of portable unvented kerosene heaters a few years ago.

I am concerned about the safe functioning of any unvented heating equipment used in Alaska's severe climate. With so many houses built or modified to be air-tight, obtaining fresh air for the occupants to breathe and heaters to burn requires permanent exterior openings. My 22 years of Alaskan experience in the design, construction and inspection of housing has been that, even knowing the necessity for the openings, the occupants will close those openings when conditions are cold or windy. The proven safety of approved heaters is certainly worth the minor cost increase.

The use of some types of unvented heaters is being considered by the Uniform Mechanical Code members. I think that Alaskans would be better served by allowing life safety decisions to be made by those organizations with the expertise and research capabilities upon which to base those decisions.

Sincerely,

Larry E. Teague

Larry E. Teague
Building Inspector

LET/jep

Work Phone: 745-3271
Home Phone: 694-2959

Alaska Fire Chief's Association

P.O. Box 8508 • Nikiski, Alaska 99635 • (907) 283-4202 • FAX 283-8404
Billy W. Harris
President

April 20, 1994

Senator Randy Phillips
Chairman
Community and Regional Affairs
State Capitol
Juneau AK 99801

Dear Senator Phillips:

At the Spring Chief's Conference in Anchorage, Alaska on April 20, 1994, the Alaska State Chief's Association reviewed and discussed HB-543 which deals with unvented gas space heaters.

We oppose HB-543 due to the following reasons:

1. Carbon monoxide poison is a serious threat to life from unvented heaters in tightly sealed Alaskan homes.

2. It is an improper practice to change National Codes and Standards by State Statute.

In closing the Alaska State Fire Chief's Association unanimously opposed this bill and we request your efforts to defeat this bill.

Sincerely,

Billy W. Harris

Billy W. Harris
President

CITY OF PALMER

231 W. EVERGREEN AVE
PALMER, ALASKA 99645

Phone (907) 745-3271

A HOME RULE CITY

April 20, 1994

The Honorable Randy Phillips, Chairman
Senate Community and Regional Affairs Committee
Alaska State Legislature
State Capitol (MS3100)
Juneau, AK 99801-1182

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The use of some types of unvented heaters is being considered by the Uniform Mechanical Code members. I think that Alaskans would be better served by allowing life safety decisions to be made by those organizations with the expertise and research capabilities upon which to base those decisions.

Sincerely,

Larry E. Teague

Larry E. Teague
Building Inspector

LET/jep

Work Phone: 745-3271
Home Phone: 694-2959

ALASKA STATE MEDICAL ASSOCIATION
4107 Laurel Street • Anchorage, Alaska 99508-5334 • (907) 562-2662

April 22, 1994

Senator Randy Phillips
Alaska State Legislature
P. O. Box V (MS 3100)
Juneau, AK 99811

Dear Senator Phillips:

House Bill 543 is apparently now in your Community and Regional Affairs Committee. This bill would change the building code to allow unvented gas space heaters in residential buildings. One of our members, Dr. Mary Ellen Gordian, the medical officer for the Municipality of Anchorage, has grave concerns regarding the safety of unvented gas space heaters, especially with regards to emission of carbon monoxide and nitrogen dioxide. I would encourage you not to act on this bill until these safety questions have been answered.

If you have any questions regarding this bill, do not hesitate to contact me.

Sincerely yours,

Donald R. Lehmann, M.D., A.B.F.P.
President, Alaska Medical Association

DRL:bj

Municipality of Anchorage

P. O. BOX 196650
ANCHORAGE, ALASKA 99519-6650
(907) 786-8160

TOM FINK,
MAYOR

DEPARTMENT OF PUBLIC WORKS
(3500 East Tudor Road)

November 19, 1993

Mr. Keith L. Kettler
Kettler Enterprises
2333 Judson Street
Longmont, Colorado 80501

Re: Temco Unvented Decorative Gas Logs and Fireplaces.

Dear Mr. Kettler:

The Municipality of Anchorage, Department of Public Works, Building Safety Division. Is conditionally approving the request for approval of Temco unvented decorative gas log fireplaces as an alternate method and material under Section 107, Uniform Administrative Code. This is based on the A.G.A. - listed Temtex/Temco gas-fired, unvented room heaters meeting the intent of the requirements of Section 807 (c). 1991 Uniform Mechanical Code (UMC).

Th condition of the approval of the Unvented Decorative Gas Logs and Fireplaces: may be installed, used, maintained and permitted to exist in any Group R Occupancy except bathrooms and bedrooms. The unvented decorative gas logs are listed for only naturai gas burning with an open flame consisting of a metal frame or base supporting simulated logs which is designed so that its primary function lies in the aesthetic effect of the logs and the flame. An unvented fireplace is a listed unvented gas log permanently installed in a freestanding enclosure or zero clearance enclosure designed and approved for installation in walls or other building structures. Unvented gas logs and fireplaces are approved as follows.

(1) Shall be equipped with an approved oxygen-depletion sensor.
(2) Shall be listed.
(3) Shall not be installed in any room which does not have an alternative primary source of heat.
(4) Shall have free air volume of at least 50 cubic feet for each 1000 BTU's of thermal output.
(5) Shall be permanently installed.

(6) Shall not be equipped or connected to any automatic ignition or shut-off device except the oxygen-depletion sensor.

Sincerely

Ron Watts

Ron Watts
Chief of Building Inspections

cc: Plan Review Engineers
Mech/Plumbing Inspectors
File

MUNICIPALITY OF ANCHORAGE
Municipal Manager's Office
Post Office Box 196650
Anchorage, Alaska 99519-6650
(907) 343-4433

TELECOPIER COVER LETTER
TELECOPIER NUMBER: (907) 343-4110

DATE: 4/20/94

FAX NUMBER: 465-4979

TOTAL NUMBER OF PAGES: 3 (including cover letter)

TO: Shirley Armstrong for Senate Comm. & Regional Affairs Committee

FROM: DAN MOORE, M.O.A.

PHONE NUMBER: 343-4282

COMMENTS:

Please distribute MOA's comments to all committee members prior to tomorrow morning's C&RA committee meeting.

Thanks for your help.

—Dm

FAX\COVERLTR

Municipality of Anchorage

P.O. BOX 196650
ANCHORAGE, ALASKA 99519-6650
TELEPHONE: (907) 343-4431
FAX: (907) 343-4991

Tom Fink, Mayor

OFFICE OF THE MAYOR

April 20, 1994

The Honorable Randy Phillips, Chairman
Senate Community and Regional Affairs Committee
Alaska State Capitol
Juneau, AK 99801

Dear Senator Phillips:

I have been informed that CSHB 543(STA) is scheduled for a teleconference tomorrow morning. The Municipality opposes this bill because of the serious potential health risks associated with allowing unvented gas space heaters in residential buildings. To clarify our opposition to the bill, I am providing the Committee with attached written comments prepared by Dr. Mary Ellen Gordian of the Municipality's Department of Health and Human Services. These comments cite a number of specific health risks that could occur if this bill were passed (see attachment).

I regret that due to a scheduling conflict, Dr. Gordian will be unable to participate in tomorrow's teleconference. Nonetheless, I request that the Municipality's comments be distributed to all Committee members prior to tomorrow's meeting, so that our concerns over the health implications of CSHB 543 (STA) are known.

Should the Committee require any additional information, please contact Dr. Gordian directly at 343-6718.

Sincerely,

Tom Fink

Tom Fink
Mayor

legis\ltf20

Municipality of Anchorage

Tom Fink, Mayor

Department of Health and Human Services
825 "L" Street
P.O. Box 196650 Anchorage, Alaska 99519-6650

April 18, 1994

House Bill 543 seeks to change the building code to allow unvented gas space heaters in residential buildings. Unvented gas heaters should not be allowed for the following reasons:

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2) Combustion heaters also give off nitrogen dioxide, a respiratory irritant, and volatile organic chemicals. Without venting these air pollutants become concentrated in the indoor air. Studies show that most people spend 90% of their time indoors. It is the most susceptible groups-the young, the elderly, and the infirm-who spend the greatest amount of time indoors.

4) Non-combustion electric space heaters that do not require ventilation are available. All combustion heaters NEED ventilation including those specified in HB543 as stated in their package insert.

3) The package insert says that these heaters require 1 square inch of ventilation for every 1000 BTU. Alaska homes are generally well-insulated. Ventilation would have to come from open windows, not likely in Alaska in the winter.

5) People will not open their windows in the winter to achieve that ventilation, because they cannot see or smell carbon monoxide.

Prepared by

Mary Ellen Gordian

Mary Ellen Gordian, MD, MPH
Medical Officer

ATTACHMENT

CITY OF KENAI

" Oil Capital of Alaska"

210 FIDALGO AVE., SUITE 200 KENAI, ALASKA 99611-7794
TELEPHONE 907-283-7535
FAX 907-283-3014

December 9, 1993

Keith Kettler
Kettler Enterprises
2333 Judson St.
Longmont, CO 80501

Dear Mr. Kettler:

After reviewing the conditional approval letter issued by the Municipality of Anchorage, the City of Kenai will also conditionally approve the use of Temco Unvented Decorative Gas Logs and Fireplaces.

The condition of the approval of the Unvented Decorative Gas Logs and Fireplaces: may be installed, used, maintained and permitted to exist in any Group R Occupancy except bathrooms and bedrooms. The unvented decorative gas logs are listed for only natural gas burning with an open flame consisting of a metal frame or base supporting simulated logs which is designed so that its primary function lies in the aesthetic effect of the logs and the flame. An unvented fireplace is a listed unvented gas log permanently installed in a freestanding enclosure or zero clearance enclosure designed and approved for installation in walls or other building structures. Unvented gas logs and fireplaces are approved as follows.

(1) Shall be equipped with an approved oxygen-depletion sensor.
(2) Shall be listed.
(3) Shall not be installed in any room which does not have an alternative primary source of heat.
(4) Shall have free air volume of at least 50 cubic feet for each 1000 BTU's of thermal output.
(5) Shall be permanently installed.
(6) Shall not be equipped or connected to any automatic ignition or shut-off device except the oxygen-depletion sensor.

Sincerely,

Robert C. Springer,
Building Official,
City of Kenai

RECORDS CERTIFICATION

I, the undersigned, an employee of the State of Alaska, do hereby certify that the microfilm images on this microform are accurate reproductions of the original records of the State of Alaska as accumulated during the regular course of business, and that it is the established policy and practice of this State to microfilm its records and to dispose of the original records after microfilm reproductions have been made.

Jerry Duncan
Signature of Camera Operator

10/1/97
Date

02-513 (REV 8/78)

HJR 37

SENATE COMMITTEE REPORT

DATE: 4/26/93 FURTHER: HES

DATE TURNED INTO OFFICE: 1/11/94

CRA Committee considered HOUSE JOINT RESOLUTION NO. 37

Urging the Congress to enact H.R. 1033 or similar legislation authorizing construction grants for publicly-owned treatment works in economically distressed rural communities.

and recommends:

[ ] replace with ________ CS ________ (____)
or [ ] adopt previous ____ CS ________ (____)
[ ] attaches amendment(s)

[ ] same title
[ ] new title
[ ] technical title change (HB only)

[ ] adopts ________ Letter of Intent

[ ] further referral to the ________

[X] do pass

[ ] do not pass

[ ] no recommendation

[ ] individual recommendations

NEW FISCAL NOTES

Department	Date	Zero	Fiscal

PREVIOUS FISCAL NOTES

Department	Date	Zero	Fiscal
LAA	4/6/93	Ø	

[ ] Appropriation No Fiscal Note

DO PASS:

Rolf E Gollen Do Pass

Joe Adams

Loren A Leman

Robin L. Taylor

Fred F. Zharoff

OTHER RECOMMENDATIONS:

Rolf E Gollen

Chair: Signature and Recommendation

FISCAL NOTE

STATE OF ALASKA
1994 LEGISLATIVE SESSION

BILL NO: HJR 37

Revision Date:
Department Affected: Legislative Affairs Agency
Title: Urging the Congress to enact H.R. 1033 or similar legislation authorizing construction grants.....
BRU: All
Sponsor: Representative Hoffman
Component: All
Requestor: House C&RA

COMPONENT SERIAL NO:

Expenditures/Revenues: (Thousands of Dollars)

OPERATING	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00
PERSONAL SERVICES	0	0	0	0	0	0
TRAVEL	0	0	0	0	0	0
CONTRACTUAL	0	0	0	0	0	0
SUPPLIES	0	0	0	0	0	0
EQUIPMENT	0	0	0	0	0	0
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	0	0	0	0	0	0
CAPITAL	0	0	0	0	0	0
REVENUE FUND SOURCE	0	0	0	0	0	0

FUNDING: (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER FUND SOURCE						
TOTAL	0	0	0	0	0	0

POSITIONS:

FULL-TIME	0	0	0	0	0	0
PART-TIME	0	0	0	0	0	0
TEMPORARY	0	0	0	0	0	0

Estimate of current year impact:

ANALYSIS: (Attach a separate page if necessary)

Zero fiscal impact.

Prepared By: Karla Schofield, Deputy Director
Phone: 465-3852
Division: Administrative Services
Date: 1/12/94

Approved By: Pamela A. Stoops, Executive Director
Agency: Legislative Affairs Agency
Date: 1/12/94

Distribution (by preparer): Leg. Finance, Legislative Sponsor, Requestor, OMB, Gov. , & Impacted Agency(ies).

FISCAL NOTE

STATE OF ALASKA
1993 LEGISLATIVE SESSION

No. 1
Bill Version: HJR 37
(H) Publish Date: 4/7/93

Revision Date:
Title: FED MONEY FOR RURAL WATER/SEWER PROJECTS
Sponsor: Representive Hoffman
Requestor:

Dept. Affected: LEGISLATIVE AFFAIRS AGENCY
BSU:
Component:
COMPONENT SERIAL NO.

Expenditures/Revenues: (Thousands of Dollars)

OPERATING	FY94	FY95	FY96	FY97	FY98	FY99
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	0	0	0	0	0	0
CAPITAL						
REVENUE FUND SOURCE:	0	0	0	0	0	0

FUNDING: (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1006 GF/MHTIA						
Other						
TOTAL	0	0	0	0	0	0

POSITIONS:

FULL-TIME	0	0	0	0	0	0
PART-TIME	0	0	0	0	0	0
TEMPORARY	0	0	0	0	0	0

Estimate of current year (FY93) impact $ None

ANALYSIS: (Attach a separate page if necessary)

Prepared by:
Division: COMMUNITY AND REGIONSL AFFAIRS COMMITTEE
Phone: 465-4853
Date: April 6, 1993
Approved by Commissioner: [signature]
Date: 4-6-93
Agency: CHAIRMAN - CRA

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COMMITTEE COPY

Official Business

COMMITTEE:
SENATE COMMUNITY & REGIONAL AFFAIRS

DATE: 1/11/94

SIGN-IN

Subject of meeting:
HJR 37 FED MONEY FOR RURAL WATER/SEWER PROJECTS

PLEASE PRINT:

NAME	ADDRESS (MAILING) & (ZIP)	PHONE	REPRESENTING	DO YOU WANT TO TESTIFY?

1/11/94

Delta Junction AK 99737 895-4658

NON-CONSTITUENT
BILL#: SB 136 NATIVE LANGUAGE EDUCATION SUPPORTS

MESSAGE: I TOTALLY SUPPORT THIS BILL WITH ITS EMPHASIS ON PRESERVATION OF NATIVE LANGUAGES. I AM COMPLETING MY MASTERS EDUCATION WITH EMPHASIS IN LANGUAGE LITERACY. THIS BILL IS ESSENTIAL FOR OUR PEOPLE'S WELL-BEING AND SELF-ESTEEM. I AM FROM MAE HERMAN NINGEOLUK'S FAMILY, A GRANDDAUGHTER. WE MUST GIVE EQUAL MERIT TO THIS.

DISTRIBUTION 06

Alaska Environmental Lobby, Inc.
P.O. Box 22151 Juneau, Alaska 99802
Phone: 907-463-3366
Fax: 907-463-3312

HJR 37

The Alaska Environmental Lobby supports HJR 37; a resolution that supports H.R.1033 a bill to amend the Federal Water Pollution Control Act to establish a grant program for construction of publicly owned treatment works in economically distressed rural communities.

AEL considers the deplorable drinking water and sanitation conditions that exist in many of our rural communities, one of the most egregious environmental problems facing us today. Every effort must be made to bring rural water and sanitation services up to the same standards that urban Alaska and the rest of the nation expect and demand.

AEL feels that it is imperative that funds granted to these communities are wisely used. We feel that the following considerations must be at the forefront of any planning and implementation process:

- Active community involvement. This includes both leadership and expertise. There are countless numbers of projects done by organizations who know little of the culture, physical environment or requirements of rural Alaska which have ended in costly and humiliating failure. It is the communities themselves that must initiate, plan and organize these systems . This may require extensive political and social organization and development. But without this first step - any project will fail. Successful solutions are not *imposed* on a community.

- Technologies appropriate to Alaska must be researched and developed. Sewer and water systems that are appropriate to California, will fail in rural Alaska. These require Alaskan solutions developed by people intimately involved with rural Alaska. An example of a solution adapted to Alaskan needs is a composting toilet developed by an Alaskan company called AlasCan.

- Systems must be energy and water efficient. Systems that require high volumes of either will be too expensive and too complex to maintain over time.

Representative Lyman F. Hoffman

Alaska State House
State Capitol • Juneau, Alaska 99801-1182 • (907) 465-4453

DISTRICT 39
AKIACHAK
AKIAK
ALEKNAGIK
ATMAUTLUAK
BETHEL
CHEFORNAK
CLARKS POINT
DILLINGHAM
EEK
EKUK
GOODNEWS BAY
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NAPAKIAK
NAPASKIAK
NUNAPITCHUK
OSCARVILLE
PLATINUM
PORTAGE CREEK
QUINHAGAK
TOGIAK
TUNTUTULIAK
TWIN HILLS

DATE: January 11, 1994

TO: Senator Randy Phillips, Chairman
Community and Regional Affairs Committee

FROM: Representative Lyman F. Hoffman

RE: HJR 37 - Urging the Congress to enact H.R. 1033 or similar legislation authorizing construction grants for publicly-owned treatment works in economically distressed rural communities.

* *

Less than one month ago, a 4 year old girl drowned in a sewage lagoon in the community of Newhalen.

In the summer of 1990, nearly 1/4 of the residents of the village of Kotlik were victims of viral meningitis caused by two leaky underground pits filled with human sewage.

Fifty-two village clinics have no running water or flush toilets, forcing community health aides to find alternative sources to clean themselves between patients. Some have resorted to heating water on the stove.

Less than 6 years from the turn of the millennium, while many national economies become dependent on advanced science and technology, Alaskan villagers rely on honeybucket dumpsters for sewage disposal and central watering spigots for drinking water.

90% of the wastewater facilities in Alaska Native villages have been assessed by the federal government as inadequate

P.O. Box 886 • Bethel, Alaska 99559 • (907) 543-3541

CORRECTION

THIS DOCUMENT
HAS BEEN REPHOTOGRAPHED
TO ASSURE LEGIBILITY

Alaska Environmental Lobby, Inc.
P.O. Box 22151 Juneau, Alaska 99802
Phone: 907-463-3366
Fax: 907-463-3312

HJR 37

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- Systems must be energy and water efficient. Systems that require high volumes of either will be too expensive and too complex to maintain over time.

- Both state and federal agencies must be constructively flexible in their requirements and regulations. Cultural, environmental, financial and practical considerations frequently preclude following "standard operating procedures" that are acceptable elsewhere.

- Solutions to drinking and solid waste problems must be economical. The state of Alaska can not and probably over the long term, will not be able to subsidize high cost systems whose operating costs can not substantially be met by the communities themselves.

- Systems must be low maintenance. Spare parts should be cheap and readily available. Maintenance personnel should be easily trained and resident in the community.

- State and federal funding must be made available. But it should not be available with terms and regulations not "appropriate" to community needs or capabilities. However communities must be accountable for all money spent.

Healthy and hygienic rural water and sewage systems may not resemble those in other parts of the country, but if they meet the above requirements, they will keep Alaskans healthy at a price Alaska can afford.

Representative Lyman F. Hoffman

Alaska State House
State Capitol • Juneau, Alaska 99801-1182 • (907) 465-4453

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and DEC has identified a need for $1.2 billion to correct water and sewer problems in rural Alaska.

Congress is now considering HR 1033 which establishes a federal grant program for construction of treatment works in economically distressed rural communities. This program would provide $300 million per year for 6 years to fund these grants.

During the 1993 legislative session, this committee sponsored SJR 25 urging the federal government to recognize the dire water and sanitation conditions in rural Alaska and to become a full partner with this state in improving this health-threatening situation.

I believe HR 1033 in Congress could be an integral part of the solution. I also believe it is imperative that the Alaska State Legislature voice its support for this measure by endorsing HJR 37.

Thank you for your consideration.

103D CONGRESS
1ST SESSION

H. R. 1033

To amend the Federal Water Pollution Control Act to establish a grant program for construction of publicly owned treatment works in economically distressed rural communities.

IN THE HOUSE OF REPRESENTATIVES

FEBRUARY 23, 1993

Mr. HAYES introduced the following bill; which was referred to the Committee on Public Works and Transportation

---

A BILL

To amend the Federal Water Pollution Control Act to establish a grant program for construction of publicly owned treatment works in economically distressed rural communities.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Rural Community Clean Water Assistance Act of 1993".

HR 1033

SEC. 2. AMENDMENT TO FEDERAL WATER POLLUTION CONTROL ACT.

The Federal Water Pollution Control Act (33 U.S.C. 1251–1387) is amended by adding at the end the following:

"TITLE VII—CONSTRUCTION GRANT PROGRAM FOR TREATMENT WORKS IN RURAL COMMUNITIES

"SEC. 701. GRANTS.

"(a) IN GENERAL.—The Administrator is authorized to make grants to any State, municipality, or intermunicipal or interstate agency for the construction of publicly owned treatment works located in economically distressed rural communities and for any purpose for which a grant may be made under sections 319(h) and 319(i) of this Act (including innovative and alternative approaches for the control of nonpoint sources of pollution).

"(b) APPLICATION.—Any State, municipality, or agency referred to in subsection (a) interested in receiving a grant under this title shall submit to the Administrator an application for such grant. Such application shall be in such form and contain such information as the Administrator may require by regulation.

"(c) TERMS AND CONDITIONS.—Grants made under this title shall be subject to such terms and conditions as

the Administrator may require by regulation to carry out the objectives of this title.

"SEC. 702. FEDERAL SHARE.

"The Federal share of any grant made under this title shall be 90 percent of the cost of construction. The non-Federal share of such costs shall be provided from non-Federal sources of funding.

"SEC. 703. ALLOTMENT.

"(a) IN GENERAL.—Sums authorized to be appropriated for a fiscal year pursuant to section 704 shall be allotted among the States for such fiscal year by the Administrator not later than the 10th day which begins after the date of the enactment of this title in the ratio which the population in economically distressed rural communities of each State bears to the total population in economically distressed rural communities of all the States.

"(b) PERIOD OF AVAILABILITY; REALLOTMENT.—Sums allotted to the States for a fiscal year shall remain available for obligation for the fiscal year for which authorized and for the period of the next succeeding 12 months. The amount of any allotment not obligated by the end of such 24-month period shall be immediately reallotted by the Administrator on the basis of the same ratio as applicable to sums allotted for the then current fiscal year, except that none of the funds reallotted by the Ad-

ministrator for a fiscal year shall be allotted to any State which failed to obligate any of the funds being reallotted. Any sum made available to a State by reallotment under this subsection shall be in addition to any funds otherwise allotted to such State for grants under this title during any fiscal year.

"SEC. 704. AUTHORIZATION OF APPROPRIATIONS.

"There is authorized to be appropriated to carry out this title $300,000,000 per fiscal year for fiscal years 1994, 1995, 1996, 1997, 1998, and 1999. Such sums shall remain available until expended.

"SEC. 705. DEFINITIONS.

"In this title, the following definitions apply:

"(1) CONSTRUCTION.—The term 'construction' has the meaning such term has in section 212.

"(2) ECONOMICALLY DISTRESSED RURAL COMMUNITY.—The term 'economically distressed rural community' means a rural community in which the median household income of the residents of such community is less than 75 percent of the national median household income, as determined by the latest decennial census of the United States.

"(3) RURAL COMMUNITY.—The term 'rural community' means a political subdivision of a State

with a population of less than 20,000, as determined by the latest decennial census of the United States.

"(4) TREATMENT WORKS.—The term 'treatment works' has the meaning such term has in section 212.".

○

HOUSE COMMITTEE REPORT

(7)

Date Referred: March 30, 1993 FURTHER REFERRALS: HESS

Date of Committee Action: 4-6-93

The COMMUNITY AND REGIONAL AFFAIRS Committee considered: HJR 37

HOUSE JOINT RESOLUTION NO. 37 FED MONEY FOR RURAL WATER/SEWER PROJECTS

Urging the Congress to enact H.R. 1033 or similar legislation authorizing construction grants for publicly-owned treatment works in economically distressed rural communities.

RECOMMENDATIONS: [ ] the same title
be replaced with _____ [ ] a new title

[ ] have attached amendments(s)
[X] do pass
[ ] do not pass
[ ] no recommendations
[ ] individual recommendations
[ ] additional referral to the _____ Committee

ADOPTS: _____ letter of Intent

ATTACHES NEW FISCAL NOTE(s): (Dept) APPROVES PREVIOUS: (Dept/Date)

[ ] fiscal impact _____ [ ] fiscal note(s) _____

[X] zero fiscal note L. H. A. [ ] zero fiscal note(s) _____

SIGNING DO PASS	DP	OTHER RECOMMENDATIONS	DNP	NR	AM
	✓				
	✓				
	✓				
	✓				
	✓				
	✓				

(H) C&RA Report

CHAIRMAN'S SIGNATURE

EPA offers help

Bush sanitation woes addressed

By STACEY JOYCE
States News Service

WASHINGTON — EPA Administrator Carol Browner promised Thursday to help Alaska combat unsanitary water and sewage conditions that are jeopardizing the health of rural villagers.

Browner appeared before the Senate Appropriations subcommittee that has jurisdiction over the Environmental Protection Agency to discuss the agency's future environmental strategy and funding.

At the hearing, Sen. Ted Stevens, R-Alaska, asked Browner to form a federal-state alliance dedicated to improving sanitation facilities and rural Alaska's quality of life.

About 170,000 villagers in Alaska have no running water or flush toilets, Stevens told Browner. In rural areas it is customary for people to use honey buckets or cart waste out to a sewage lagoon. To shower or wash clothes, residents often must rely on a community water point. Such accommodations are not just primitive, but unhealthy, Stevens said.

The senator displayed poster-sized photographs of children playing near lagoons containing raw sewage and of waste floating down streams in warm weather.

Calling the photos "compelling," Browner said, "It's far too easy to forget that some people don't have basic health and hygiene facilities."

Since August, more than 150 people in Alaska have contracted hepatitis A, which can cause liver damage or — in extreme cases — death, said Keith Kelton, director of facility construction and operation for the state's Department of Environmental Conservation.

Browner told the lawmakers that EPA already has convened a joint task force to address the inadequate, and in some cases nonexistent, water and sewage facilities.

"We are working to address these very pressing concerns, and we look forward to working with you and the Alaska delegation to develop whatever it takes to solve this problem," Browner said.

Stevens also spoke of the difference a financial partnership could make.

"If state and federal government put up $10 million for 10 years at least we could make a dent," he said.

To succeed, however, priorities are critical, Stevens said. Otherwise, money can be wasted and the program could unravel if projects are not thought out.

Jeff Silverman, spokesman for the Alaska Federation of Natives, echoed those sentiments.

"It's more than just capital outlays. More than that, success depends upon human resources," such as training people in a village to operate new sewage facilities, Silverman said in a phone interview.

"The problem is going to take five to 10 years to be resolved, but each step is very valuable," he said. "It's clear from what Carol Browner said that we're started on our way."

WATER: EPA takes a look

Continued from Page B-1

News article ⇒ Sen. Stevens

RECORDS CERTIFICATION

I, the undersigned, an employee of the State of Alaska, do hereby certify that the microfilm images on this microform are accurate reproductions of the original records of the State of Alaska as accumulated during the regular course of business, and that it is the established policy and practice of this State to microfilm its records and to dispose of the original records after microfilm reproductions have been made.

Jerry Duncan
Signature of Camera Operator

10/1/97
Date

02-519 (REV 8/78)

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CONFIRMATION: BOARD OF CERTIFIED DIRECT-ENTRY MIDWIVES

CONFIRMATION: BOARD OF CLINICAL SOCIAL WORK EXAMINERS

CONFIRMATION: BOARD OF EDUCATION

CONFIRMATION: BOARD OF MARITAL AND FAMILY THERAPY

CONFIRMATION: BOARD OF NURSING

CONFIRMATION: PROFESSIONAL TEACHING PRACTICES COMMISSION

CONFIRMATION: UNIVERSITY OF ALASKA BOARD OF DIRECTORS

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Bd. of Education

AK 20008

ALASKA 2000 RECOMMENDATIONS

On October 21-23, 1992, the Alaska Board of Education reviewed the 49 Alaska 2000 recommendations and the public comments on them. The Board eliminated some recommendations, revised some, and tabled a few. The recommendations that follow are those that the Board advanced for implementation.

SETTING OUR SIGHTS

• **Vision.** Adopt the following vision for an Alaska public education: Alaskans envision a public school system controlled by the public that will graduate world-class students who will communicate effectively, think logically and critically, discover and nurture their own creative talents, possess essential vocational and technological skills, be responsible citizens, be committed to their own health and fitness, accept personal responsibility for sustaining themselves economically, and have self-esteem.

EMPOWERING PARENTS

• **Charter Schools.** Implement a three-year pilot program authorizing charter schools. (Charter schools operate under a contract between teachers, parents and local school boards to expand educational choice. An appeal procedure would be built into the program.)

• **School Choice.** Make existing public school choice programs available to all Alaska students by encouraging student transfers between school districts, boarding home arrangements, and a choice of correspondence schools.

• **Choice of Postsecondary Courses.** Enable high school students to attend appropriate postsecondary classes as part of their high school program.

• **Advisory Boards.** Establish advisory boards or committees for each school in Alaska.

• **Encouraging Parental Responsibility.** Conduct a public information campaign reminding parents of their responsibility for their children's welfare.

IMPROVING STUDENT PERFORMANCE

• **Performance Standards.** Develop high performance standards for students and assessment methods in the following ten subject areas: (1) English; (2) Math; (3) Science; (4) Geography; (5) History; (6) Skills for a healthy life; (7) Government and citizenship; (8) Fine arts; (9) Technological competence; (10) World languages.

• **Student Testing.** Measure student achievement of academic standards at three benchmark levels: (1) ages 8-10; (2) ages 12-14; and ages 16-18. Measures will be tied to standards.

• **Certificates of Mastery.** Issue state "Certificates of Mastery" to students who reach the standards of the third benchmark.

• **Increased Student Contact Time.** Require a minimum of 180 days of student contact annually exclusive of staff inservice days and approved school closures. Increase student contact days to 200 by the year 2000.

• **Thirteen-Year Funding.** Fund students for 13 years of education through the age of 19, including tuition reimbursement for college credits.

• **Early Childhood Education.** In recognition that improved academic achievement for all students lies in strong early childhood education and strong parental support, the State Board will encourage all communities in Alaska, in concert with their schools, to form broad-based coalitions to develop a plan to assure that children enter school ready to learn, and to structure primary school programs so that children receive a solid base upon which to build success in school and in later life.

KEEPING KIDS IN SCHOOL

• **School Conservation Corps.** Create a School Conservation Corps, combining public service work with school work.

• **Vocational Programs.** Encourage school districts to establish business-supported vocational programs that will prepare students to successfully enter the workforce or attend a postsecondary school.

• **Residential High Schools.** Assess the need and feasibility for building additional residential high schools and adding dormitories at existing high schools.

REMOVING RARRIERS TO INNOVATION AND EXCELLENCE

• **Reporting Student Contact Time.** Allow school districts to report student contact time in hours instead of days.

• **Regulation Review.** Review Alaska education regulations every six years.

• **Waivers from Regulations.** Establish waivers for state education regulations so that school districts can use innovative approaches to improve student achievement.

• **Swift Filing of Regulations.** Establish shorter timelines for regulation approval following the public comment period. Leave time for thorough public review.

AK2K

An Education Initiative

Published by the Alaska Department of Education January 21, 1993

• Alaska 2000 was conceived in June of 1991 when Governor Walter J. Hickel told the State Board of Education and newly appointed Education Commissioner Jerry Covey to develop a plan to improve Alaska's schools.

• The plan, called Alaska 2000, was patterned after the national America 2000 strategy of deeply involving citizens, not just educators, in a systemic restructuring of the school system.

• The State Board of Education appointed a task force of 21 prominent Alaskans to identify the barriers to significant improvement of Alaska's public schools. This task force met during November, 1991.

• In January, 1992, Governor Hickel appointed four Alaskans to chair the major AK2K committees. The four were Mary Jane Evans Fate of Fairbanks, Oral Freeman of Ketchikan, Edward B. Rasmuson of Anchorage, and Noreen Thompson of Kodiak.

• Their committees, comprising more than 100 Alaskans from inside and outside the education system, were charged with developing recommendations to resolve the issues identified by the task force that met in November. The committees held their first meeting at the end of January and met periodically through May, 1992.

• The 10 areas examined by these committees were:

- Choice & Incentives
- Early Childhood
- Facilities
- Finance
- Laws & Regulations
- Quality of Workforce
- Shared Decisions/Self-Renewal
- Student Outcomes & Assessment
- System Accountability
- Technology

• In May and June of 1992, the committees presented 95 recommendations to the State Board. After reviewing them and combining similar ideas, the Board offered 49 recommendations to the public for comment.

• The Board publicized the recommendations with 250,000 copies of an eight-page tabloid newspaper and through a radio ad campaign.

• An Education Summit, featuring U.S Secretary of Education Lamar Alexander, was held September 14 & 15 in Anchorage. Many hours of public comment were taken at this summit. The Board also held hearings in Fairbanks and Juneau and by teleconference in more than 40 other communities.

• After reviewing public comments, the Board approved 40 recommendations as the final AK2K plan.

• The Board presented the final recommendations to Governor Hickel in early December, 1992. Governor Hickel supported the AK2K plan and began developing a legislative package to implement the recommendations.

• At its December, 1992, meeting, the State Board introduced the first of several proposed regulations to implement AK2K recommendations. It also instructed the Department of Education to begin work on educational standards and assessments, a major part of the AK2K effort.

• The Standards and Assessment Oversight Committee will meet in early February, 1993, to set directions for the English/language arts, mathematics, and science committees, which have been asked to develop statewide student standards. The Oversight Committee will also begin discussion of an assessment program.

• The State Board of Education opened a period of public comment in December on a proposed regulation that establishes a statewide "Vision for Student Performance." The proposal envisions a school system that graduates world-class students who have demonstrated communication skills, logical thinking, creativity, vocational and technical skills, citizenship, health and fitness, and responsibility. The proposal echoes the AK2K recommendation defining a public education as including a working knowledge of English/language arts, math, science, geography, history, skills for a healthy life, government, fine arts, technology, and world languages.

• At its January meeting, the State Board of Education will consider opening a period of public comment on another AK2K recommendation. The proposal would define a process for school districts to obtain waivers from certain regulations in order to implement innovative programs to improve student achievement.

• The State Board of Education and Commissioner Covey will continue to work on the remaining AK2K recommendations for introduction and implementation.

More information?
Alaska 2000
Commissioner's Office
Dept. of Education
801 W. 10th St.
Juneau AK 99801

ALASKA 2000

RAISING STANDARDS FOR EDUCATORS

• **Educator Training Standards**. Adopt state standards for educator training institutions requiring: (1) earlier and more responsible field experience for prospective educators; (2) education skill tests for applicants before admission to teacher or administrator programs.

• **Additional Certification Requirements**. Add the following state certification requirements for new educators: (1) a satisfactory score on an educator assessment test (for example, the National Teacher Exam), and (2) one year of satisfactory teaching experience or one year of successful internship under a master teacher prior to receiving a Type A certificate.

• **Knowledge of Technology**. Require competency in educational technology for initial teacher certification and certification renewal.

• **Technology Training**. Provide statewide training and support in educational technology for teachers.

• **Master Teachers**. Establish a master teacher certificate endorsement.

IMPROVING INSTRUCTION AND ADMINISTRATION

• **Staff Evaluation** Revise certificated staff evaluation process to include parent and student comments, training for evaluators, and an independent audit of the evaluation process every three years.

• **Educator Tenure.** Amend the Alaska educator tenure law as follows: (1) application for tenure may be made after two years of service in a school district under a regular teaching certificate; (2) evaluations and recommendations must be presented with application; (3) local tenure review board must approve the application, subject to final approval by the local school board; (4) unsuccessful applicants may reapply annually.

• **Research and Development**. Provide funding to support research and development including grants for effective student incentive programs.

• **Telecommunications Network**. Combine existing networks to create a statewide educational telecommunications network, accessible to all schools, that will support audio, video, and data.

• **Telecommunications Reporting System**. Implement a statewide administrative telecommunications reporting system.

MAKING DOLLARS COUNT

• **Sharing Costs**. Each school district should pay a portion of the cost of education.

• **School Price Index**. Develop an Alaska school price index to provide funding equity to the diverse geographical regions of the state.

• **Financial Standards.** Adopt state standards for financial reporting by school districts.

• **Transportation Costs**. School districts should be reimbursed for transportation at the lower of the district operated rate or the competitive bid rate for pupil transportation.

• **Rental Provision.** Include a rental provision in the foundation program so school districts can rent schools instead of owning them.

KEEPING SCHOOLS SAFE AND MODERN

• **Capital Funding Priorities**. Fund the following priorities on the state's school construction list: Priority 1 (Health/Life/Safety) & Priority 3 (Protection of Structures) to clear a backlog exceeding $100 million.

• **New Schools and Classrooms**. Fund the following priority on the state's school construction list: Priority 2 (Unhoused Students), which will cost $100 million annually in addition to a backlog of $250 million.

• **Sharing Capital Costs** Change state capital projects funding from 100% grants to state and local sharing on a sliding scale, based on a community's ability to pay.

• **School Construction Standards**. Adopt state standards for school construction including space, quality of materials, costs, and standards to make possible the most effective use of current and anticipated information. (For example, telecommunications access for all classrooms.)

• **Funding Major Maintenance**. Provide annual set-aside for Major Maintenance of $20-$40 million annually. (Major Maintenance is a proposed new category of funding that combines the current Priority 3, Protection of Structures, and Priority 4, Code Upgrades.)

• **Preventive Maintenance**. Require school districts to demonstrate ongoing preventive maintenance as a condition for state funding of Major Maintenance.

THE SEAL OF THE STATE OF ALASKA

Official Business

COMMITTEE: SENATE HESS

DATE: January 29, 1993

SIGN-IN

Subject of meeting:

ALASKA STATE BOARD OF EDUCATION PRESENTATION
ALASKA 2000

PLEASE PRINT!

NAME	ADDRESS (MAILING) & (ZIP)	PHONE	REPRESENTING	DO YOU WANT TO TESTIFY ?
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[illegible]	[illegible]	[illegible]	[illegible]	
Robert Walp	804 P Street #4 Anchorage 99501	272-2238	State Board of Education	
Karen Meehan	3640 Chiniak Bay Dr. Anch., AK 99515	344-0662	State Board of Education	
Marilyn Wilson	Senator Bert Sharp State Capitol Building, Room 514	465-6548	Senator Bert Sharp	
DON FANCHER	BOX 2027 BETHEL, AK 99559	543-2326	State Board of Education	
DUANE GUILEY	DOE, JUNEAU	465 2891	DOE	
[illegible]	[illegible]	[illegible]		
LARRY STEVENS	SEN. JACKO ROOM 125	3770	Sen. Jacko	

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Kotzebue, AK 99752-0158
442-3501 - w

442-3340 - fax

Patricia Norheim will not be present
P.O. Box 642
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772-4837 - h

c/o Petersburg City Schools
772-4719 - fax

Judy Norton
9824 Atka Circle
Eagle River, AK 99577
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ADVISORY MEMBERS:

Dr. Roger O. Jarvis, GM-14, USAF
Military Advisor will not be present
21 MSSQ/MSE, Bldg. 21-590
Base Education Center
Elmendorf AFB, AK 99506
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