

ALASKA LEGISLATURE COMMITTEE BILL FILES - 1987 - 1988 8879

HB 53 cont., HB 54 *Leg. Files* 220<sup>720</sup>

## INTRODUCTION

On August 27, 1984 the Office of Environmental Health was contacted by Ms. Betsy Blassingham, Outpatient Department, regarding one patient who may have been occupationally exposed to pentachlorophenol (PCP) during the application of a wood preservative. While meeting with Ms. Blassingham and the patient, it was determined that the patient was employed by the Lower Kuskokwim School District (LKSD), working on the construction of a utilidor, and may have been applying the wood preservative while not wearing the proper safety equipment. The patient had been tentatively diagnosed as having "Chemical Jaundice".

Based on this information, Dr. Donn Kruse, Community Health Director, was contacted. Dr. Kruse contacted LKSD and it was found that an additional five employees were involved in the wood preservative application. All employees were provided medical evaluations and testing. Additional action taken included reporting to the appropriate personnel and agencies, conducting a site evaluation, and obtaining product information.

## PERSONNEL AND AGENCIES CONTACTED

Mr. Lew Colwell, Staff Sanitarian, Area Environmental Services Section, AANHS.

Dr. John Middaugh, State Epidemiologist, Department of Health and Social Services, State of Alaska.

Mr. Bill Blythe, Industrial Hygienist, Alaska Department of Labor, OSHA.

Mr. Corey Willis, Alaska Department of Environmental Conservation, Region II.

Mr. Joe Sullivan, Plant Facilities Manager, Lower Kuskokwim School District.

Mr. Mike Franks, Plant Facilities, Lower Kuskokwim School District.

## SITE EVALUATION

In order to confirm and investigate the information received, a site evaluation was performed on August 27. The following information was accumulated during the evaluation, for which LKSD supervising personnel were present.

### OCCUPATIONAL SITE:

The utilidor was being constructed for the high school in Bethel. The school, LKSD administrative offices, and LKSD supply trailers were located in the general vicinity. The utilidor was being constructed below the natural grade and passed beneath the boardwalk connecting the school's entrance and the LKSD offices. The site at which the wood preservative was being applied was located outside, adjacent to the utilidor and school. At the time of the evaluation, the utilidor project was halfway completed. School had been in session since August 21.

### CHEMICAL IDENTIFICATION AND STORAGE:

The wood preservative was described as being "Penta 10 to 1 Concentrate" as per the LKSD purchase order. It was obtained through Commercial Buyers and Expeditors, Linwood, WA. A total of one 55 gallon drum of PCP chemical concentrate was received. The 55 gallon drum, two uncovered 5 gallon containers of diluted PCP, and two paint brush rollers were being stored outside, at the site where application was being performed. The only label and identification noted, was the stenciled word "Pentachlorophenol" on the 55 gallon drum.

### METHOD OF APPLICATION:

The application of PCP began the second week of July, 1984. Prior to application, the PCP was diluted 10:1 with diesel fuel. The wood was treated prior to being used for utilidor construction.

Initially, PCP was applied using a power sprayer. One employee sprayed while other employees assisted by rotating treated and untreated wood for chemical application.

After two to four days, the spraying operation was discontinued due to misting of the chemical. Employees applying the chemical, as well as those working in supply trailers down wind, complained of tastes and odors from the misting effect. The operation then changed to a roll-on application, using long handled paint roller type brushes.

#### SAFETY EQUIPMENT AND PRECAUTIONS UTILIZED:

It was reported that prior to beginning PCP application, LKSD provided two to three training sessions for employees. Instruction as to how to use equipment, apply the chemical, and precautions were provided.

During the spraying operation, the sprayer was instructed to wear rubber gloves, rubber boots, and a supplied - air respirator. A compressor, located up wind from the application site, provided air to the respirator. Employees rotating the wood for treatment were instructed to stay 25 - 30 feet up wind during spraying. Assisting employees were instructed to wear rubber boots, rubber gloves, and dust type filter masks. During the rolling operation, employees were instructed to wear rubber boots, rubber gloves, and dust type filter masks.

It was reported that safety equipment was not always worn. Reports included: spraying without using the supplied - air respirator, PCP soaking through gloves and clothing, and undiluted PCP on hands while mixing.

While performing the site evaluation, preparations were being made for relocation of the PCP supply to a locked LKSD Quon'set Hut, so that it would be inaccessible to unauthorized personnel. LKSD personnel were also considering using the hut for PCP application. LKSD was also in the process of ordering rubberized suits to be worn while applying PCP.

#### RECOMMENDATIONS:

During the site evaluation, the following recommendations were provided:

1. Continue as planned to relocate the PCP supply to a locked area so that it would be inaccessible to unauthorized personnel and the general public. Employees relocating the PCP had already been instructed to wear protective clothing, including rain suits.
2. All storage containers should be sealed. The containers should be labeled as a health hazard. The chemical and containers should not be disposed of.
3. Continue to order safety equipment. All safety equipment should be N I O S H approved for use with PCP.
4. Suspend all application and treatment of wood with PCP, until the proper recommendations for safe and appropriate application can be provided.

#### PRODUCT INFORMATION

The manufacturer of the PCP was American Tar Company, Seattle, WA. The following information was provided by a sales representative:

Product Number: 1410

Contents: 43% Pentachlorophenol, 57% Mineral Spirits

Dilution: One gallon of Penta 10 to 1, with 10 gallons of any mineral or petroleum distillate. After proper dilution, the solution contains 5% PCP and considered ready to use.

Recommended Application: Brush on, Roll on, or dip method. Spraying is not recommended. Apply in a well ventilated area wearing protective gloves and goggles.

#### HEALTH HAZARDS

Pentachlorophenol is a highly poisonous substance and may enter the body through ingestion, inhalation and contact with the eyes or skin. According to the NIOSH/OSHA Occupational Health Guidelines for Chemical Hazards publication 81-123, Occupational Health Guideline for Pentachlorophenol, Summary of Toxicology,

"Pentachlorophenol readily penetrates the skin; systemic intoxication is cumulative and has been fatal. Intoxication is characterized by weakness, anorexia, weight loss, and profuse sweating; there may also be headache, dizziness, nausea, vomiting, dyspnea, and chest pain."

The guidelines further state that individuals with preexisting liver or kidney dysfunctions are more susceptible to intoxication. Skin irritation may occur from prolonged or repeated exposures to solutions as dilute as 1% (see attachment for further information). According to other sources (see previous section), PCP is a suspected carcinogen, and a known mutagen and teratogen.

#### SUMMARY OF MEDICAL FINDINGS

The following information was obtained from PCIS's, the attending physicians, and during the site evaluation. All but two patients were seen at the Public Health Service Hospital. Due to their non-beneficiary status, the others were seen at the Bethel Family Clinic. Renal and liver function tests were performed on all six patients. In all six patients, renal functions were found to be normal. None were reported to have had Viral Hepatitis B, or be heavy consumers of alcohol. At least four were known to have had current hepatitis B immunizations.

Of the six patients, three were heavily involved in the spray application of PCP. Liver dysfunction tests indicated mild and moderate degrees of liver dysfunction. Two were known to have had current hepatitis B immunizations. Ages ranged between 23 and 27 years, and all were males.

It was reported that all three sprayers, sprayed for prolonged periods without using the supplied - air respirator, or while using dust type masks for protection. Patient number 1 sprayed for one day without any protection.

Patient numbers 2 and 3 reported smelling and tasting the chemical, as well as it penetrating their clothing.

Patient number 2 also reported he was involved in the spray application only, lasting for three days. He also reported a past dermatitis on his thigh area from chemical exposure.

Patient number 3 also reported contaminating his hands with undiluted PCP during mixing. It was also reported that he had been involved in the rolling application of PCP, and had also worked for the city applying PCP in the past.

Symptoms reported, the dates they were reported, and the test results are listed below:

Patient No. 1 August 27

Symptoms: Weakness, anorexia, sweating, coughing for a few days

Test Results: Mild liver dysfunction

Patient No. 2 August 27

Symptoms: Nausea, anorexia, profuse sweating, headache, diarrhea

Test Results: Mild liver dysfunction.

Patient No. 3 August 24 and 27

Symptoms: Nausea, mild anorexia, full feeling in stomach, jaundice symptoms progressing to major nausea, anorexia and jaundice by August 30.

Test Results: Moderate liver dysfunction. Additional testing for Hepatitis A and B were performed. Results for Hepatitis A were negative. Results have not yet been received from Hepatitis B testing.

Two of the remaining patients, patient numbers 4 and 5, were only involved in the rolling application of PCP. The other, patient number 6, may have been slightly involved in both spraying and rolling, but was primarily a supervisor. Liver dysfunction tests indicated a mild liver dysfunction in only patient number 6. Ages ranged from 17 to 26, and all were males. Two were known to have current hepatitis B immunizations.

Patient number 4 reported not wearing a dust mask at first, but began wearing it after getting dizzy. He also reported PCP soaking through clothing and gloves.

Patient number 5 reported wearing the dust mask and gloves, but also getting PCP on his hands and clothing.

Symptoms reported, the dates they were reported, and the test results are listed below:

Patient No. 4 August 27

Symptoms: Slightly nauseated, mild anorexia

Test Results: Normal liver function

Patient No. 5 August 27

Symptoms: Slightly nauseated

Test Results: Normal liver function

Patient No. 6 August 27

Symptoms: None reported

Test Results: Mild liver dysfunction

All patients reported symptoms to occur on or about the time of exposure. Exact dates were not provided.

### CONCLUSION

Although not conclusive, the information in this report supports the conclusion that LKSD employees were highly suspected of being overexposed to PCP during the application of a wood preservative. The three employees involved in the spray application seemed to be most affected, reporting symptoms characteristic of PCP intoxication. This was also supported by the liver dysfunction common to all three. Of the three patients, patient number 3 was the most severely affected.

The two employees involved in the rolling application of PCP reported mild symptoms, and were found not to have liver dysfunctions. These employees were suspected of not being exposed to PCP to the extent of those involved in the spray application. The last employee may have been slightly involved in both rolling and spraying, but did not report symptoms and did have liver dysfunction.

The following circumstances were determined to be contributory to PCP overexposure:

1. PCP was not applied correctly or safely, particularly during the spray application.
2. Employees were not wearing the proper respiratory, eye, hand and bodily protective equipment.
3. Employees were not aware of the health hazards associated with PCP, or the importance of safety equipment.
4. Employees were not properly supervised during PCP application.

Additional factors were noted as presenting unsafe conditions: PCP was applied and stored in a school area and containers were not labeled as to their contents or associated health hazards.

Other factors which may have contributed to chemical exposure include: the actual percent concentration of PCP applied by employees, the type of protection and methods utilized during the dilution of the 43% PCP, the type of power sprayer used and the concentration of PCP in the air at the time of spraying, and the manner in which treated wood was subsequently handled and the degree to which it may have contributed to the cumulative effects.

In order to conclusively determine occupational overexposure to PCP, chemical analysis of blood and urine samples would be required of all employees. At present, samples are being obtained for submission to Center for Disease Control, Atlanta, Georgia for analysis.

In a general sense, there are at least four additional considerations which deserve attention. First, because of the incidence of hepatitis B in Alaska, there exists an appreciable percentage of the population which may be more susceptible to a chemical intoxication of this nature, due to preexisting liver dysfunction. Second, the symptoms arising from such an intoxication could be mistakenly attributed by the recipient to other causes, resulting in possible repeated exposures and cumulative health effects. Third, PCP is widely used as a wood preservative and has not been restricted. However, it will become a restricted use pesticide in November, 1984. Finally, the synergistic effect of these considerations, as well as their independent importance, is cause for close surveillance.

## RECOMMENDATIONS

The following recommendations are provided for use with pentachlorophenol. These guidelines should be part of a comprehensive plan, designed for the safe use of PCP, and should be initiated prior to beginning any application process:

1. Users of PCP should receive detailed and professional training, to include the importance of protective equipment and the associated health hazards (Training and certification will be required when PCP becomes a restricted use pesticide).
2. All personnel should receive medical examinations and screening prior to application. Personnel with impaired liver or kidney functions should not work with PCP. Those working with PCP on a regular and continual basis, should receive medical monitoring for possible cumulative health effects.
3. A system should be established for reporting accidental exposures.
4. The State of Alaska's Department of Labor should be consulted for guidelines as to how to safely handle, apply, and store PCP. This should also include recommendations as to the type of safety equipment for respiratory, eye, hand and bodily protection.
5. Application and storage sites should not be accessible to unauthorized personnel or the general public. All storage containers should be labeled.
6. Special precautions should be utilized when diluting PCP concentrates.
7. Precautions and safety equipment should also be utilized during the subsequent handling of treated materials.
8. Qualified supervision should be provided to employees working with PCP.

This incident of occupational exposure should receive further attention and follow-up. LKSD supervising personnel expressed an interest in receiving professional training and possible certification. Such training should be expanded to include other interested personnel, such as city and construction employees.



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# Occupational Health Guideline for Pentachlorophenol

## INTRODUCTION

This guideline is intended as a source of information for employees, employers, physicians, industrial hygienists, and other occupational health professionals who may have a need for such information. It does not attempt to present all data; rather, it presents pertinent information and data in summary form.

## SUBSTANCE IDENTIFICATION

- Formula:  $C_5Cl_5OH$
- Synonyms: PCP; penta
- Appearance and odor: Light brown solid with a pungent odor when hot.

## PERMISSIBLE EXPOSURE LIMIT (PEL)

The current OSHA standard for pentachlorophenol is 0.5 milligram of pentachlorophenol per cubic meter of air ( $mg/m^3$ ) averaged over an eight-hour work shift.

## HEALTH HAZARD INFORMATION

### • Routes of exposure

Pentachlorophenol can affect the body if it is inhaled, if it comes in contact with the eyes or skin, or if it is swallowed. It may enter the body through the skin.

### • Effects of overexposure

Exposure to pentachlorophenol may cause irritation of the eyes and respiratory tract. Bronchitis has been reported to occur. Systemic effects from either a large exposure or repeated smaller exposures include weakness, loss of appetite, nausea, vomiting, shortness of breath, chest pain, excessive sweating, headache, and dizziness. In fatal cases the temperature is often very high and death may occur as early as three hours after the onset of symptoms. The risk of serious intoxication is greater in hot weather. Persons with decreased liver or kidney functions are more susceptible to poisoning from this chemical. Repeated exposure to pentachlorophenol may cause an acne-like skin rash and liver

damage. Commercial pentachlorophenol may be contaminated with dioxin compounds which are much more toxic than pentachlorophenol.

### • Reporting signs and symptoms:

A physician should be contacted if anyone develops any signs or symptoms and suspects that they are caused by exposure to pentachlorophenol.

### • Recommended medical surveillance

The following medical procedures are recommended and available to each employee who is exposed to pentachlorophenol:

#### 1. Initial Medical Examination:

—A complete history and physical examination. The purpose is to detect pre-existing conditions that might place the exposed employee at increased risk, and to establish a baseline for future health monitoring. Examination of the cardiovascular system, eyes, upper respiratory tract, liver, and kidneys should be stressed. The skin should be examined for evidence of chronic disorders. Analysis of the urine for pentachlorophenol may be helpful in estimating the extent of absorption.

2. Periodic Medical Examination: The aforementioned medical examinations should be repeated on an annual basis.

### • Summary of toxicology

Pentachlorophenol dust and mist cause irritation of the eyes and upper respiratory tract; absorption results in an increase in metabolic rate and hyperpyrexia; prolonged skin exposure causes an acneform dermatitis. Human exposure to dust or mist concentrations greater than  $1 mg/m^3$  causes pain in the nose and throat, violent sneezing, and cough;  $0.3 mg/m^3$  may cause some nose irritation; persons acclimated to pentachlorophenol can tolerate concentrations up to  $2.4 mg/m^3$ . Pentachlorophenol readily penetrates the skin; systemic intoxication is cumulative and has been fatal. Intoxication is characterized by weakness, anorexia, weight loss, and profuse sweating; there also may be headache, dizziness, nausea, vomiting, dyspnea, and chest pain. In fatal cases, the body temperature is often very high and death may occur

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These recommendations reflect good industrial hygiene and medical surveillance practices and their implementation will assist in achieving an effective occupational health program. However, they may not be sufficient to achieve compliance with all requirements of OSHA regulations.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Public Health Service Centers for Disease Control  
National Institute for Occupational Safety and Health

U.S. DEPARTMENT OF LABOR  
Occupational Safety and Health Administration

death has occurred as early as 3 hours after the onset of symptoms. The risk of serious intoxication is increased during hot weather; persons with impaired liver or kidney function are more susceptible to the effects of pentachlorophenol. The dust, mist, and vapor cause eye irritation. Prolonged exposure of workers has caused an uneven dermatitis. 10 workers engaged in production of pentachlorophenol for 5 to 10 months developed a widely disseminated skin eruption characterized by small and large furuncles, brown pigmentation, and some cicatrization. 7 workers also developed severe bronchitis, all but 1 worker still showed signs of extensive acne more than a year after cessation of exposure, and 4 still complained of bronchitis. On the skin, solutions of pentachlorophenol as dilute as 1% may cause irritation if contact is repeated or prolonged.

## CHEMICAL AND PHYSICAL PROPERTIES

### • Physical data

1. Molecular weight: 266.3
2. Boiling point (760 mm Hg): 311 C (592 F) (decomposes)
3. Specific gravity (water = 1): 2.0
4. Vapor density (air = 1 at boiling point of pentachlorophenol): Not applicable
5. Melting point: 182 - 190 C (360 - 374 F)
6. Vapor pressure at 20 C (68 F): 0.00017 mm Hg
7. Solubility in water, g/100 g water at 20 C (68 F): 0.002
8. Evaporation rate (butyl acetate = 1): Not applicable

### • Reactivity

1. Conditions contributing to instability: None.
2. Incompatibilities: Contact with strong oxidizers may cause fires and explosions.
3. Hazardous decomposition products: Toxic gases and vapors (such as hydrogen chloride, chlorinated phenols, and carbon monoxide) may be released when pentachlorophenol decomposes.
4. Special precautions: None.

### • Flammability

1. Not combustible

### • Warning properties

1. Odor Threshold: The AIHA *Hygienic Guide* states that pentachlorophenol has a characteristic odor. No quantitative information is available, however, concerning the odor threshold of this substance.

2. Irritation Levels: The *Documentation of TLVs* states that "dusts are particularly irritating to the eyes and nose, in concentrations appreciably greater than 1 mg/m<sup>3</sup>, but some irritation of the nose may occur at 0.3 mg/m<sup>3</sup>. Hardened workers can tolerate up to 2.4 mg/m<sup>3</sup>."

3. Evaluation of Warning Properties: Through its irritant effects, pentachlorophenol can be detected within three times of the permissible exposure limit. For the purposes of this guideline, therefore, pentachlorophenol is treated as a material with good warning

properties.

## MONITORING AND MEASUREMENT PROCEDURES

### • General

Measurements to determine employee exposure are best taken so that the average eight-hour exposure is based on a single eight-hour sample or on two four-hour samples. Several short-time interval samples (up to 30 minutes) may also be used to determine the average exposure level. Air samples should be taken in the employee's breathing zone (air that would most nearly represent that inhaled by the employee).

### • Method

An analytical method for pentachlorophenol is in the *NIOSH Manual of Analytical Methods*, 2nd Ed., Vol. 4, 1973, available from the Government Printing Office, Washington, D.C. 20402 (GPO No. 017-033-00317-3).

• Gleason, M. N., Gosselin, R. E., Hodge, H. C., and Smith, R. P. *Industrial Toxicology of Commercial Products* (3rd ed.), Williams and Wilkins, Baltimore, 1969.

## RESPIRATORS

• Good industrial hygiene practices recommend that engineering controls be used to reduce environmental concentrations to the permissible exposure level. However, there are some exceptions where respirators may be used to control exposure. Respirators may be used when engineering and work practice controls are not technically feasible, when such controls are in the process of being installed, or when they fail and need to be supplemented. Respirators may also be used for operations which require entry into tanks or closed vessels, and in emergency situations. If the use of respirators is necessary, the only respirators permitted are those that have been approved by the Mine Safety and Health Administration (formerly Mining Enforcement and Safety Administration) or by the National Institute for Occupational Safety and Health.

• In addition to respirator selection, a complete respiratory protection program should be instituted which includes regular training, maintenance, inspection, cleaning, and evaluation.

## PERSONAL PROTECTIVE EQUIPMENT

• Employees should be provided with and required to use impervious clothing, gloves, face shields (eight-inch minimum), and other appropriate protective clothing necessary to prevent any possibility of skin contact with pentachlorophenol or liquids containing pentachlorophenol.

• If employees' clothing has had any possibility of being contaminated with pentachlorophenol or liquids containing pentachlorophenol, employees should change into uncontaminated clothing before leaving the work premises.

- Clothing which has had any possibility of being contaminated with pentachlorophenol should be placed in closed containers for storage until it can be discarded or until provision is made for the removal of pentachlorophenol from the clothing. If the clothing is to be laundered or otherwise cleaned to remove the pentachlorophenol, the person performing the operation should be informed of pentachlorophenol's hazardous properties.
- Where there is any possibility of exposure of an employee's body to pentachlorophenol or liquids containing pentachlorophenol, facilities for quick drenching of the body should be provided within the immediate work area for emergency use.
- Non-impervious clothing which becomes contaminated with pentachlorophenol should be removed immediately and not re-worn until the pentachlorophenol is removed from the clothing.
- Employees should be provided with and required to use dust- and splash-proof safety goggles where there is any possibility of pentachlorophenol or liquids containing pentachlorophenol contacting the eyes.
- Where there is any possibility that employees' eyes may be exposed to pentachlorophenol or liquids containing pentachlorophenol, an eye-wash fountain should be provided within the immediate work area for emergency use.

## SANITATION

- Skin that becomes contaminated with pentachlorophenol should be immediately washed or showered with soap or mild detergent and water to remove any pentachlorophenol.
- Workers subject to skin contact with pentachlorophenol or liquids containing pentachlorophenol should wash with soap or mild detergent and water any areas of the body which may have contacted pentachlorophenol at the end of each work day.
- Eating and smoking should not be permitted in areas where pentachlorophenol or liquids containing pentachlorophenol are handled, processed, or stored.
- Employees who handle pentachlorophenol or liquids containing pentachlorophenol should wash their hands thoroughly with soap or mild detergent and water before eating, smoking, or using toilet facilities.

## COMMON OPERATIONS AND CONTROLS

The following list includes some common operations in which exposure to pentachlorophenol may occur and control methods which may be effective in each case:

Operation	Controls
Formulation of preservatives, pesticides, and fungicides	Process enclosure; local exhaust ventilation; personal protective equipment
Application as a preservative for wood, starch, paint, adhesives, leather, latex, and oils; use in slime-algae control; use as a pesticide, herbicide, and snail control agent	Personal protective equipment
Manufacture of pentachlorophenol	Process enclosure; local exhaust ventilation; personal protective equipment

## EMERGENCY FIRST AID PROCEDURES

In the event of an emergency, institute first aid procedures and send for first aid or medical assistance.

### • Eye Exposure

If pentachlorophenol or liquids containing pentachlorophenol get into the eyes, wash eyes immediately with large amounts of water, lifting the lower and upper lids occasionally. Get medical attention immediately. Contact lenses should not be worn when working with this chemical.

### • Skin Exposure

If pentachlorophenol or liquids containing pentachlorophenol get on the skin, immediately wash the contaminated skin using soap or mild detergent and water. If pentachlorophenol or liquids containing pentachlorophenol penetrate through the clothing, remove the clothing immediately and wash the skin using soap or mild detergent and water. If irritation is present after washing, get medical attention.

### • Breathing

If a person breathes in large amounts of pentachlorophenol, move the exposed person to fresh air at once. If breathing has stopped, perform artificial respiration. Keep the affected person warm and at rest. Get medical attention as soon as possible.

### • Swallowing

When pentachlorophenol or liquids containing pentachlorophenol have been swallowed and the person is conscious, give the person large quantities of water immediately. After the water has been swallowed, try to get the person to vomit by having him touch the back of his throat with his finger. Do not make an unconscious person vomit. Get medical attention immediately.

### • Rescue

Move the affected person from the hazardous exposure. If the exposed person has been overcome, notify someone else and put into effect the established emergency

rescue procedures. Do not become a casualty. Understand the facility's emergency rescue procedures and know the locations of rescue equipment before the need arises.

## SPILL AND DISPOSAL PROCEDURES

- Persons not wearing protective equipment and clothing should be restricted from areas of spills until cleanup has been completed.
- If pentachlorophenol is spilled, the following steps should be taken.

1. Ventilate area of spill.
  2. Collect spilled material in the most convenient and safe manner and deposit in sealed containers for reclamation or for disposal in a secured sanitary landfill. Liquid containing pentachlorophenol should be absorbed in vermiculite, dry sand, earth, or a similar material.
- Waste disposal method:  
Pentachlorophenol may be disposed of in sealed containers in a secured sanitary landfill.

## REFERENCES

- American Conference of Governmental Industrial Hygienists: "Pentachlorophenol," *Documentation of the Threshold Limit Values for Substances in Workroom Air* (3rd ed., 2nd printing), Cincinnati, 1974.
- American Industrial Hygiene Association: "Pentachlorophenol and Sodium Pentachlorophenate," *Hygienic Guide Series*, Detroit, Michigan, 1970.
- Baader, E. W., and Bauer, H. J.: "Industrial Intoxication Due to Pentachlorophenol," *Industrial Medicine and Surgery*, 20:286-290, 1951.
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- Patty, F. A. (ed.): *Toxicology, Vol. II of Industrial Hygiene and Toxicology* (2nd ed. rev.), Interscience, New York, 1963.
- Spector, W. S. (Vols. I, II), Negherbon, W. O. (Vol. III), Grebe, R. M. (Vol. IV), and Dittmer, D. S. (Vol. V) (eds.): *Handbook of Toxicology*, Saunders, Philadelphia, 1956-1959.
- Thienes, C. H., and Haley, T. J.: *Clinical Toxicology* (5th ed.), Lea and Febiger, Philadelphia, 1972.

## RESPIRATORY PROTECTION FOR PENTACHLOROPHENOL

Condition	Minimum Respiratory Protection* Required Above 0.5 mg/m <sup>3</sup>
Particulate or Vapor Concentration	
2.5 mg/m <sup>3</sup> or less	Any chemical cartridge respirator with an organic vapor cartridge(s) and dust, fume, and mist filter(s), including pesticide respirators which meet the requirements of this class.** Any supplied-air respirator.** Any self-contained breathing apparatus.**
25 mg/m <sup>3</sup> or less	Any chemical cartridge respirator with a full facepiece, an organic vapor cartridge(s), and dust, fume, and mist filter(s), including pesticide respirators which meet the requirements of this class. A gas mask with a chin-style or a front- or back-mounted organic vapor canister and dust, fume, and mist filter, including pesticide respirators which meet the requirements of this class. Any supplied-air respirator with a full facepiece, helmet, or hood. Any self-contained breathing apparatus with a full facepiece
150 mg/m <sup>3</sup> or less	

\*\*If eye irritation occurs, full-facepiece respiratory protective equipment should be used.

Alaska State Legislature  
Representative Nino Harjo

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1-2-11  
2-1-11  
3-1-11

HB 53 SOME OTHER FINES FOR OTHER MISDEMEANORS AND  
VIOLATIONS FOR COMPARISON PURPOSES

You will receive a fine of \$5,000 for:

- concealing merchandise worth \$50 or more.
- issuing a bad check for \$50.00
- deceptive business practices (be careful when you sell your old car)
- misrepresenting the use of a propelled vehicle (of course the mileage is accurate, my grandmother only drove it to church on Sunday!)
- defrauding a creditor
- simulating legal process (be careful how you dun people who owe you money).

You will receive a fine of \$1,000 for:

- concealing merchandise of less than \$50 value.
- writing a bad check for less than \$50
- impersonating a public servant etc.

I hope this helps put the fines in HB 53, which deal with dangers to human life & limb, in proper perspective...

Original sponsors: Koponen, Goll,  
Davis and Donley

1 IN THE HOUSE BY THE JUDICIARY COMMITTEE

2 CS FOR HOUSE BILL NO. 53 (Judiciary)

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 FIFTEENTH LEGISLATURE - FIRST SESSION

5 A BILL

6 For an Act entitled: "An Act relating to violations of workplace safety  
7 laws."

8 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

9 \* Section 1. AS 18.60.095(a) is amended to read:

10 (a) An employer who wilfully or repeatedly violates a provision  
11 of AS 18.60.010 - 18.60.105 that is applicable to the employer or a  
12 standard or regulation adopted under AS 18.60.010 - 18.60.105 may be  
13 assessed by the commissioner a civil penalty of not more than \$25,000  
14 [\$10,000] for each violation.

15 \* Sec. 2. AS 18.60.095(b) is amended to read:

16 (b) An employer who receives a citation for a serious violation  
17 of a provision of AS 18.60.010 - 18.60.105 that is applicable to the  
18 employer or of a standard or regulation adopted under AS 18.60.010 -  
19 18.60.105 shall be assessed by the commissioner a civil penalty of not  
20 less than [UP TO] \$1,000 and not more than \$10,000 for each violation.

21 For purposes of this subsection, a serious violation is considered to  
22 exist if the violation creates in the place of employment a substan-  
23 tial probability of death or serious physical harm. However, a seri-  
24 ous violation is not considered to exist if the employer did not, and  
25 could not with the exercise of reasonable diligence, know of the  
26 presence of the violation.

27 \* Sec. 3. AS 18.60.095(c) is amended to read:

28 (c) An employer who receives a citation for a violation of a  
29 provision of AS 18.60.010 - 18.60.105 that is applicable to the

1 employer or [OF] a standard or regulation adopted under AS 18.60.010 -  
2 18.60.105, and the violation is specifically determined not to be of a  
3 serious nature, may be assessed by the commissioner a civil penalty of  
4 up to \$5,000 [\$1,000] for each violation.

5 \* Sec. 4. AS 18.60.095(d) is amended to read:

6 (d) An employer who fails to correct a violation within the  
7 period permitted for its correction for which a citation has been  
8 issued may be assessed by the commissioner a civil penalty of not more  
9 than \$10,000 [\$1,000] for each day during which the failure to correct  
10 the violation continues.

11 \* Sec. 5. AS 18.60.095(e) is amended to read:

12 (e) An employer who knowingly [WILFULLY] or repeatedly violates  
13 a provision of AS 18.60.010 - 18.60.105 that is applicable to the  
14 employer or a standard or regulation adopted under AS 18.60.010 -  
15 18.60.105, and the violation causes death to an employee, upon con-  
16 viction, is punishable by a fine of not more than \$150,000 [\$10,000],  
17 or by imprisonment for not more than six months, or by both. However,  
18 upon a second conviction after a prior conviction for a violation  
19 causing death, an employer is punishable by a fine of not more than  
20 \$500,000 [\$20,000], or by imprisonment for not more than one year, or  
21 by both.

22 \* Sec. 6. AS 18.60.095(f) is amended to read:

23 (f) A person who knowingly makes a false statement, representa-  
24 tion, or certification in an application, record, report, plan or  
25 other document filed or required to be maintained under AS 18.60.010 -  
26 18.60.105, upon conviction, is punishable by a fine of not more than  
27 \$25,000 [\$10,000], or by imprisonment for not more than six months, or  
28 by both.

29 \* Sec. 7. AS 18.60.095(g) is amended to read:

1           (g) An employer who violates the posting requirements of this  
2 chapter shall be assessed by the commissioner a civil penalty of up to  
3 \$2,000 [\$1,000] for each violation.

4       \* Sec. 8. The amendments made by this Act apply to violations that  
5 occur on or after the effective date of this Act.

Offered: 1/30/87  
 Referred: Judiciary and  
 Finance

Original sponsors: Koponen, Goll  
 and Davis

1 IN THE HOUSE

BY THE HEALTH, EDUCATION AND  
 SOCIAL SERVICES COMMITTEE

2

CS FOR HOUSE BILL NO. 53 (HESS)

3

IN THE LEGISLATURE OF THE STATE OF ALASKA

4

FIFTEENTH LEGISLATURE - FIRST SESSION

5

A BILL

6 For an Act entitled: "An Act relating to penalties for violation of work-  
 7 place safety laws."

8 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

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 21 For purposes of this subsection, a serious violation is considered to  
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2 \$5,000 [\$1,000] for each violation.

3 \* Sec. 8. The amendments made by this Act apply to violations that  
4 occur on or after the effective date of this Act.

Introduced: 1/13/87  
 Referred: Health, Education &  
 Social Services, Judiciary and  
 Finance

1 IN THE HOUSE

BY KOPONEN AND GOLL

2

HOUSE BILL NO. 53

3

IN THE LEGISLATURE OF THE STATE OF ALASKA

4

FIFTEENTH LEGISLATURE - FIRST SESSION

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A BILL

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1 chapter shall be assessed by the commissioner a civil penalty of up to  
2 \$5,000 [\$1,000] for each violation.

3 \* Sec. 8. The amendments made by this Act apply to violations that  
4 occur on or after the effective date of this Act.

HB

54

**HOUSE COMMITTEE REPORT**

(11)

Date referred: 2/23/87

FURTHER REFERRALS:

DATE: 3/11/87

The Finance Committee has considered HB 54

"An Act creating the Alaska Seismic Hazard Center."

**RECOMMENDS:**

- replace with CS HB 54 (HESS)  the same title
- attached amendment(s)  a new title
- do pass
- do not pass
- no recommendation
- individual recommendations
- additional referral to the \_\_\_\_\_ Committee

**ADOPTS:**  \_\_\_\_\_ letter of intent

**ATTACHES NEW FISCAL NOTE(s):**

- fiscal impact  same as previous fiscal note published \_\_\_\_\_
- zero fiscal note  same as previous zero fiscal note published \_\_\_\_\_
- zero with analysis

**SIGNING TO PASS:**

ADAMS Al Adams

FOURCHOT Pat Fourchot

BOYER Mark Boyer

GOLL Bob Goll

ARSON Ronald Arson

WACKHAMMER Wackhammer

RIEGER Steve Rieger

BROWN Fay Brown

DAVIS Mike Davis

**SIGNING OTHER RECOMMENDATIONS:**

WALLIS F. Key Wallis no rec

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Albert M. Adams  
Chairman's signature

**STATE OF ALASKA 1987 LEGISLATIVE SESSION  
FISCAL NOTE**

**REQUEST:** \_\_\_\_\_

Bill Version: GSHB 54 (HESS)

Publish Date: \_\_\_\_\_

Revision Date: \_\_\_\_\_

Agency Affected: University of Alaska

Title: Creating an Alaska earthquake  
& volcano hazards assessment project

BRU: \_\_\_\_\_

Sponsor: Koponen & Davis

Components: \_\_\_\_\_

Requestor: House Finance Committee

**EXPENDITURES/REVENUES: (Thousands of Dollars)**

OPERATING	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92
PERSONAL SERVICES	-	-	-	-	-	-
TRAVEL	-	-	-	-	-	-
CONTRACTUAL	-	-	-	-	-	-
SUPPLIES	-	-	-	-	-	-
EQUIPMENT	-	-	-	-	-	-
LAND & STRUCTURES	-	-	-	-	-	-
GRANTS, CLAIMS	-	-	-	-	-	-
MISCELLANEOUS	-	-	-	-	-	-
<b>TOTAL OPERATING</b>	-	-	-	-	-	-

<b>CAPITAL</b>	-	-	-	-	-	-
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<b>REVENUE</b>	-	-	-	-	-	-
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**FUNDING: (Thousands of Dollars)**

GENERAL FUND	-	-	-	-	-	-
FEDERAL FUNDS	-	-	-	-	-	-
OTHER	-	-	-	-	-	-
<b>TOTAL</b>	-	-	-	-	-	-

**POSITIONS:**

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

**ANALYSIS : (Attach a separate page if necessary)**

There is fiscal impact associated with this bill but funds are included in the FY 88 budget. These funds, as well as the need for any new funds, will be addressed through the budget process.

Prepared by: Al Adams, Chair *APA*  
Division: House Finance Committee

Phone: 465-3706  
Date: 3/11/87

Approved by Commissioner: \_\_\_\_\_  
Agency: \_\_\_\_\_

Date: \_\_\_\_\_

**Distribution (by preparer):**

- Legislative Finance
- Legislative Sponsor
- Requestor
- Office of Management and Budget
- Impacted Agency(ies)
- Senate Secretary

Original sponsors: Koponen and Davis

1 IN THE HOUSE BY THE HEALTH, EDUCATION AND  
SOCIAL SERVICES COMMITTEE  
2 CS FOR HOUSE BILL NO. 54 (HESS)  
3 IN THE LEGISLATURE OF THE STATE OF ALASKA  
4 FIFTEENTH LEGISLATURE - FIRST SESSION  
5 A BILL  
6 For an Act entitled: "An Act creating an Alaska earthquake and volcano  
7 hazards assessment project."  
8 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:  
9 \* Section 1. FINDINGS. The legislature finds that the systematic  
10 collecting, recording, processing, and archiving of seismic data on earth-  
11 quakes and volcanic eruptions and the evaluation of the data to identify  
12 and assess potential earthquake and volcanic hazards throughout the state  
13 are in the public interest and necessary to orderly, safe, and cost-effec-  
14 tive economic development and land-use planning.  
15 \* Sec. 2. AS 14.40 is amended by adding a new section to read:  
16 Sec. 14.40.075. ESTABLISHMENT OF ALASKA EARTHQUAKE AND VOLCANIC  
17 HAZARDS ASSESSMENT PROJECT. (a) The University of Alaska shall  
18 establish an Alaska earthquake and volcano hazards assessment project  
19 within the seismology program of the geophysical institute. The  
20 project shall  
21 (1) collect, record, process, and archive seismic data on  
22 earthquakes and volcanic eruptions in the state;  
23 (2) conduct seismological studies relating to earthquake  
24 and volcano hazards assessment;  
25 (3) evaluate earthquake and volcanic seismic data to assist  
26 in the identification and assessment of earthquake and volcanic haz-  
27 ards that may pose a significant risk to lives and property in the  
28 state;  
29 (4) inform public officials, industry, and private citizens

1 of potential earthquake or volcanic risks and assist in planning to  
2 reduce risks to lives and property; and

3 (5) coordinate its activities with other organizations and  
4 agencies that monitor, collect, assess, and conduct research on earth-  
5 quake and volcano hazards in order to avoid duplication of effort.

6 (b) The administration and management of the project is under a  
7 university employee designated the state seismologist. The state  
8 seismologist shall provide timely information concerning earthquake  
9 and volcano hazards to public officials, industry, and private citi-  
10 zens and serve as liaison to state and federal agencies in the event  
11 of emergencies due to seismic and volcanic activities.

12 \* Sec. 3. AS 41.08.017(b) is repealed and reenacted to read:

13 (b) Systematic collecting, evaluation, archiving, and distribu-  
14 tion of geologic data and information on earthquakes, volcanic erup-  
15 tions, and engineering geology and identification of potential seis-  
16 mic, volcanic, and other geological hazards throughout the state are  
17 in the public interest and necessary to orderly, safe, and cost-effec-  
18 tive development.

19 \* Sec. 4. AS 41.08.020(b) is amended to read:

20 (b) In addition, the division of geological and geophysical  
21 surveys shall:

22 (1) collect, record, evaluate, and distribute data on the  
23 quantity, quality, and location of underground, surface, and coastal  
24 water of the state;

25 (2) publish or have published data on the water of the  
26 state;

27 (3) require the filing with it of the results and findings  
28 of surveys of water quality, quantity, and location;

29 (4) require of water well contractors, the filing with it

1 of basic water and aquifer data normally obtained, including but not  
2 limited to well location, estimated elevation, well driller's logs,  
3 pumping tests and flow measurements, and water quality determinations;

4 (5) accept and spend funds for the purposes of this sec-  
5 tion, AS 41.08.017, and 41.08.035 and enter into agreements with  
6 individuals, public or private agencies, communities, private indus-  
7 try, state agencies, and agencies of the federal government;

8 (6) collect, [RECORD,] evaluate, [ARCHIVE] and distribute  
9 geologic data on seismic events and engineering geology of the state;

10 (7) identify potential seismic hazards that might affect  
11 development in the state;

12 (8) inform public officials and industry about potential  
13 seismic hazards that might affect development in the state.

**STATE OF ALASKA 1987 LEGISLATIVE SESSION  
FISCAL NOTE**

**REQUEST:** \_\_\_\_\_

Bill Version: CS HB 54  
Publish Date: \_\_\_\_\_

Revision Date: 2/18/87

Agency Affected: Natural Resources  
BRU: Geology, Energy and Mining

Title: Ak. Earthquakes and Volcanoes  
Hazards Project

Sponsor: Rep. Koponen and Rep. Davis

Components: \_\_\_\_\_

Requestor: Rep. Koponen

**EXPENDITURES/REVENUES: (Thousands of Dollars)**

OPERATING	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING						

CAPITAL						
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REVENUE						
---------	--	--	--	--	--	--

**FUNDING: (Thousands of Dollars)**

GENERAL FUND		75.1 **				
FEDERAL FUNDS						
OTHER						
TOTAL		75.1 **				

**POSITIONS:**

FULL-TIME						
PART-TIME						
TEMPORARY						

**ANALYSIS :** (Attach a separate page if necessary)

\*\* In the DNR FY 88 proposed budget, 75.1 is being transferred to the University of Alaska to consolidate the State's Seismic Monitoring efforts. This merging of the two programs will facilitate management and provide a measure of economy. (See Page 2)

Prepared by: Carol Wilson Phone: 465-2400

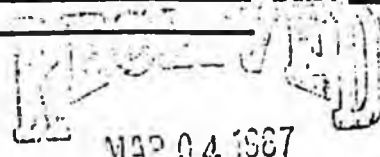
Division: Commissioner's Office Date: 2/19/87

Approved by Commissioner: [Signature] Date: 2/19/87

Agency: Natural Resources

Distribution (by preparer):

- Legislative Finance
- Legislative Sponsor
- Requestor
- Office of Management and Budget
- Impacted Agency(ies)
- Senate Secretary



LEGISLATIVE FINANCE

HE 54

**TRANSFERS FROM/DELETIONS:**

AGENCY Department of Natural Resources  
 DRU Geology, Energy and Mining  
 COMPONENT Land & Public Safety  
 PROJECT Seismic Engineering

**FUNDING INFORMATION**

**TRANSFERS TO/ADDITIONS:**

AGENCY University of Alaska  
 DRU Organized Research  
 COMPONENT Geophysical Institute  
 PROJECT Seismic Monitoring

What is being transferred from or deleted from this unit? Why? Include PCN and position title.

The Seismic Engineering Project is being transferred to the University of Alaska to consolidate the State's Seismic Monitoring efforts. In the past this project has worked closely with the University to monitor and document earthquake activity in Alaska. This merging of the two programs will facilitate the management process and provide a measure of economy as fiscal resources decline.

AMOUNT	EXPEND. BY OBJECT	AMOUNT
(71.3)	100 Para. Service	71.3
(1.0)	200 Travel	1.0
(2.0)	300 Contractual	2.0
(0.8)	400 Supplies	0.8
	500 Equipment	
	600 Lands/Bldgs.	
	700 Grants, Claims	
	800 Miscellaneous	
(75.1)	TOTAL	75.1

What is being transferred to or added to this unit? Why? Include PCN and position title.

The Seismic Engineering Project is being transferred to the University of Alaska to consolidate the State's Seismic Monitoring efforts. In the past this project has worked closely with the University to monitor and document earthquake activity in Alaska. This merging of the two programs will facilitate the management process and provide a measure of economy as fiscal resources decline.

		1-A Transfer	
	1002	Fed. Receipts	
	1003	CF Match	
(75.1)	1004	General Fund	75.1
	1006	1-A Receipts	
		Other	
	15	PFT	
	16	PPI	
	17	Non Permanent	
	18	Staff Months	

CA

TRANSFER WITHIN  
ADJUSTED BASE

AGENCY Department of Natural Resources  
 DRU Geology, Energy and Mining  
 COMPONENT Land & Public Safety

Cowper 1/87

FY 88

Page 1 of 1

Revised Date

STATE OF ALASKA 1987 LEGISLATIVE SESSION  
FISCAL NOTE

REQUEST: \_\_\_\_\_

Bill Version: CSHB 54 (HESS)  
Publish Date: HOUSE 2/23/87

Revision Date: \_\_\_\_\_

Agency Affected: University of Alaska  
BRU: UAF Organized Research

Title: Creating Alaska Seismic Hazard Center

Sponsor: Koponen

Components: \_\_\_\_\_

Requestor: House Hess

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92
PERSONAL SERVICES		17.0	17.5	18.0	18.6	19.1
TRAVEL		17.0	17.5	18.0	18.6	19.1
CONTRACTUAL		40.0	41.2	42.4	43.7	45.0
SUPPLIES		4.0	4.1	4.2	4.4	4.5
EQUIPMENT		22.0	22.7	23.3	24.0	24.8
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING		100.0	103.0	106.1	105.3	112.6

CAPITAL						
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REVENUE						
---------	--	--	--	--	--	--

FUNDING: (Thousands of Dollars)

GENERAL FUND		100.0	103.0	106.1	109.3	102.6
FEDERAL FUNDS						
OTHER						
TOTAL						

POSITIONS:

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

ANALYSIS : (Attach a separate page if necessary) See attached

Prepared by: Brian Rogers, Director of Budget Development Phone: 907 474-6490  
Division: University of Alaska Date: February 20, 1987

Approved by: Vice President [Signature] Date: February 20, 1987  
Agency: University of Alaska

Distribution (by preparer):  
Legislative Finance  
Legislative Sponsor  
Requestor  
Office of Management and Budget  
Impacted Agency(ies)  
Senate Secretary

CONTINUATION OF FISCAL NOTE ANALYSIS

No. 1  
2/23/87

For Bill/resolution No. CSHB 54(HESS)

In August 1986, the UAF Geophysical Institute agreed to take over the seismic hazard program from the Alaska Department of Natural resources. The FY88 UA budget contains \$130.5 in partial funding for this program. The additional funding contained in this fiscal note provides funding of Alaska's program for collection, recording and archiving of seismic data at an annual level equivalent to the level when the program was transferred to UAF.



# Alaska State Legislature

Representative Mike Davis

P.O. Box V  
Juneau, Alaska 99811  
(907) 465-4930/4941

Interim Office:  
P.O. Box 81435  
Fairbanks, Alaska 99708

## MEMORANDUM

To: Rep. Al Adams, Chairman  
House Finance Committee

From: Rep. Mike Davis, Member  
House Finance Committee

Date: March 9, 1987

Re: CSHB 54 (Hess); An Act creating an Alaska earthquake  
and volcano hazards assessment project.

---

The House Finance Committee established a subcommittee to review CSHB 54, and the subcommittee was specifically directed to address conflicts regarding the bill's fiscal notes. The establishment of an Alaska earthquake and volcano hazards assessment project does not in itself have a fiscal impact, although there would be costs associated with the project's future activities.

Based on the information provided below, the subcommittee recommends that the bill be allowed to proceed with a zero fiscal note. The subcommittee further recommends that the fiscal note state that budget hearings are the proper forum in which to determine the level of funding to be appropriated for the project.

CSHB 54 is accompanied by two fiscal notes. DNR provided a net-zero fiscal note consisting of a 75.1 transfer from the department to the University of Alaska, whereas the university provided a fiscal note of 100.0 for FY 88 and of slightly more than 100.0 per year for the next four years.

These conflicts emanate from circumstances beyond either party's control. In August 1986, DNR and the university agreed to transfer the position and duties of the state seismologist from DNR to the university's geophysical institute, pending legislative approval. This agreement was based on the understanding that DNR would transfer to the university all of the funds that the department had allocated for that purpose.

The funds in question consisted of 75.1 from DNR's seismic engineering program and 56.4 from the department's seismic monitoring program, for a total of 131.5 [due to a 1.0 discrepancy, the university understood that 130.5 was involved in the transfer]. Prior to the agreement taking place between the agencies, funding for the seismic engineering program had been reduced from 115.7 to 75.1, and funding for the seismic monitoring program had been reduced from 83.0 to 56.4.

Subsequent to the agreement, DNR eliminated all funding for the seismic monitoring program. This funding was eliminated under the direction of OMB, since the 56.4 in question was a one-time-item appropriation that had been provided last year in HB 574.

The result of these actions is that the Department of Natural Resources FY 88 budget shows an outgoing transfer of 75.1 to the University of Alaska, whereas the University of Alaska FY 88 budget shows an incoming transfer of 130.5. The university's 100.0 fiscal note is intended as a supplement to the anticipated transfer of 130.5, for a total FY 88 budget of 230.5.

The subcommittee on CSHB 54 believe that these conflicts are best resolved through the budget process. It is the belief of the subcommittee that the sponsors of the legislation, the University of Alaska, and the Department of Natural Resources concur in taking this approach.



Alaska State Legislature  
House of Representatives  
COMMITTEE ON HEALTH, EDUCATION  
AND SOCIAL SERVICES

OFFICIAL BUSINESS

POUCH V  
JUNEAU, AK 99811  
465-3759

LETTER OF INTENT

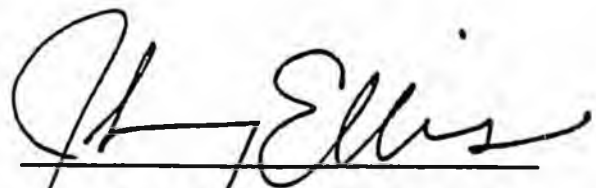
CSHB 54 (HESS)

"AN ACT CREATING AN ALASKA EARTHQUAKE AND VOLCANO HAZARDS  
ASSESSMENT PROJECT"

It is the intent of the House Health, Education and Social Services Committee that a request be made for federal monies from the Federal Earthquake Hazards Reduction Act of 1977 (Public Law 95-124) and other applicable federal sources to help offset the costs of The Alaska Earthquake and Volcano Hazards Assessment Project. The amount requested should match the state funding level for this program.

In an effort to save the State both time and expense, this letter is offered in place of a resolution to Congress and shall be delivered to the members of the Alaska Congressional Delegation with appropriate backup information.

  
Rep. Nillo Koponen, Co-Chair

  
Rep. Johnny Ellis, Co-Chair

February 18, 1986

Alaska State Legislature  
Representative Niilo Koponen

Pouch V  
Juneau, Alaska 99811  
(907) 465-4992

542 4th Avenue, Suite C  
Fairbanks, Alaska 99701  
(907) 456-8161

POSITION PAPER  
HB 54 "AN ACT CREATING AN ALASKA EARTHQUAKE  
AND VOLCANO HAZARDS ASSESSMENT PROJECT"  
FEBRUARY 17, 1987

From the International impact of the 1912 Katmai explosion and 1964 earthquake to the more recent eruptions of Mount St. Augustine last year and in 1976, the State of Alaska has been voted for its seismic activity.

The purpose of this legislation is to ensure that the State maintains a viable seismographic network to record Alaska's earthquake and volcanic eruptions, by establishing the Alaska earthquake and volcanic hazards assessment project within the University of Alaska's Geophysical Institute's seismology program.

To implement this project, the Department of Geological and Geophysical Survey has agreed to transfer to this project the money for seismic monitoring and seismic hazard mitigation for the state of Alaska. DGGs will continue to be responsible for the geological aspects of seismic hazard mitigation.

HB 54 amends AS.14.40 (University of Alaska and Community Colleges) by adding the Alaska Earthquake and Volcanic Hazards Assessment project within the University. AS 41.08.020 (Geological and Geophysical Survey) will maintain it's same responsibilities except for section (6) which will now read "collect, evaluate and distribute geologic data on seismic events and engineering geology of the state".

The creation of the hazards assessment project will place the state of Alaska at the forefront of seismic studies within the nation and the world and provide the data necessary to protect lives and property and preserve safe, cost-effective economic development and land use planning.

public interest and necessary to orderly, safe and cost-effective development in the state. (1 ch 113 SLA 1977; am 1 ch 101 SLA 1981)

**Effect of amendments.** The 1981 amendment amended all of the amendments adopted by the General Assembly.

**Sec. 41.08.020. Powers and duties.** (a) The state geologist shall conduct geological and geophysical surveys to determine the potential of Alaskan land for production of metals, minerals, fuels, and geothermal resources; the location and supply of primary and construction materials; the potential geologic hazard to buildings, roads, bridges and other installations and structures; and shall conduct such other surveys and investigations as will advance knowledge of the geology of Alaska. With the approval of the commission, the state geologist may acquire, by gift or purchase, professional and geophysical reports, surveys and similar information.

(b) In addition, the division of geological and geophysical surveys shall:

(1) collect, record, evaluate, and distribute data on the quantity, quality and location of underground, surface and coastal water of the state;

(2) publish or have published data on the water of the state;

(3) require the filing with it of the results and findings of surveys of water quality, quantity, and location;

(4) require of water well contractors, the filing with it of basic water and aquifer data normally obtained, including but not limited to well location, estimated elevation, well driller's logs, pumping tests and flow measurements and water quality determinations;

(5) accept and spend funds for the purposes of this section, AS 41.08.017 and 41.08.035 and enter into agreements with individuals, public or private agencies, communities, private industry, state agencies and agencies of the federal government;

~~(6) collect, record, evaluate, approve and disseminate data on seismic events and engineering geology of the state;~~

(7) identify potential seismic hazards that might affect development in the state;

(8) inform public officials and industry about potential seismic hazards that might affect development in the state. (S 1 ch 93 SLA 1972; am § 2 ch 41 SLA 1977; am § 7 ch 175 SLA 1980; am § 2 ch 101 SLA 1981)

**Cross references.** For declaration of legislative policy on geothermal resources, see § 1, ch 135, SLA 1980, in the Temporary and Special Acts.

**Effect of amendments.** The 1980 amendment added "geothermal resources"

to the first clause of subsection (a)

The 1981 amendment added paragraphs (6), (7) and (8) of subsection (a)

**Sec. 41.08.030. Printing and distribution of report.** The state geologist shall print and publish an annual report, shall also print special and topic reports, and shall cause to be printed for the use of the state, including the production of posters and reports, and shall, under the authority of the commission, cause to be printed and distributed to the public, reports and maps obtained by other persons or agencies, which reports and maps are obtained by the state geologist and are not otherwise available to the public. (S 1 ch 101 SLA 1981)

**Sec. 41.08.035. Regulations.** By Department of Natural Resources. The Department of Natural Resources, upon approval of the commission, shall promulgate regulations relating to and providing for the effective administration, recording, and distribution of all records and reports of the state geologist. (S 1 ch 101 SLA 1981)

**Sec. 41.08.040. Cooperation with other agencies.** The state geologist, with the consent of the commission, may enter into cooperative agreements with federal, state and local agencies to perform geological and geophysical surveys, investigations and activities. (S 1 ch 101 SLA 1981)

### Chapter 10, Soil Conservation District Law

Section	Section
10. Declaration of policy	50. Compensation of board members
20. Creation and boundaries of district	60. Compensation of board members
30. Purpose of chapter	70. Qualification of board members
40. Soil and water conservation board	80. Term of office
50. Executive director	90. Board meeting
60. Appointment	
70. Qualification of board members	
80. Term of office	
90. Board meeting	

**Collateral references.** 1. Chapter 10, Title 10, Alaska Statutes, 1963 Edition, as amended.  
2. Application, § 16, 22, 41, 43, Alaska Statutes, 1963 Edition, as amended.  
3. C.A.S., Appendix, § 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

**Sec. 41.10.010. Declaration of policy.** The farm, forest and grazing land of the state is a basic need of the state. For the policy of this chapter, in the interest of the health, safety, and economic well-being of the people of the state, to provide for the development, use, and conservation of this land in accordance with the policies of the Alaska Act of 1980.

**Sec. 41.10.020. Creation and boundaries of soil conservation district. (Repealed, § 11 ch 29 SLA 1982.)**

# STATE OF ALASKA

## DEPARTMENT OF NATURAL RESOURCES

OFFICE OF THE COMMISSIONER

STEVE COWPER, GOVERNOR

400 WILLOUGHBY AVE.  
JUNEAU, ALASKA 99801-1796  
PHONE: (907) 465-2400

March 3, 1987

The Honorable Al Adams  
Chairman, House Finance Committee  
Alaska State Legislature  
P.O. Box V  
Juneau, AK 99811

Dear Representative Adams:

Subject: Committee Substitute for House Bill 54 (HESS).

Position: The department supports the establishment of the Alaska earthquake and volcano hazards assessment project within the University of Alaska.

Background: The seismic monitoring program within the Department of Natural Resources was transferred to the Geophysical Institute within the University of Alaska in August of 1986, to consolidate state seismic programs and facilitate program management.

The department is transferring \$75.1 in its FY 88 budget to the University to help fund this program.

Please let me know if you would like additional information.

Sincerely,

*Judith M. Brady*  
for  
Judith M. Brady  
Commissioner

cc: Representative Koponen  
Representative Davis  
Committee Members  
Governor's Legislative Liaison

**STATE OF ALASKA 1987 LEGISLATIVE SESSION  
FISCAL NOTE**

**REQUEST:** \_\_\_\_\_

Bill Version: CS HB 54

Publish Date: \_\_\_\_\_

Revision Date: 2/18/87

Agency Affected: Natural Resources

Title: Ak. Earthquakes and Volcanoes  
Hazards Project

BRU: Geology, Energy and Mining

Sponsor: Rep. Kosonen and Rep. Davis

Components: \_\_\_\_\_

Requestor: Rep. Kosonen

**EXPENDITURES/REVENUES: (Thousands of Dollars)**

OPERATING	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
<b>TOTAL OPERATING</b>						

CAPITAL						
---------	--	--	--	--	--	--

REVENUE						
---------	--	--	--	--	--	--

**FUNDING: (Thousands of Dollars)**

GENERAL FUND		75.1 **				
FEDERAL FUNDS						
OTHER						
<b>TOTAL</b>		75.1 **				

**POSITIONS:**

FULL-TIME						
PART-TIME						
TEMPORARY						

**ANALYSIS : (Attach a separate page if necessary)**

\*\* In the DNR FY 88 proposed budget, 75.1 is being transferred to the University of Alaska to consolidate the State's Seismic Monitoring efforts. This merging of the two programs will facilitate management and provide a measure of economy. (See Page 2)

Prepared by: Carol Wilson Phone: 165-2400

Division: Commissioner's Office Date: 2/19/87

Approved by Commissioner: [Signature] Date: 2/19/87

Agency: Natural Resources

**Distribution (by preparer):**

- Legislative Finance
- Legislative Sponsor
- Requestor
- Office of Management and Budget
- Impacted Agency(ies)
- Senate Secretary

**TRANSFERS FROM/DELETIONS:**

AGENCY Department of Natural Resources  
 BRU Geology, Energy and Mining  
 COMMENT Land & Public Safety  
 PROJECT Seismic Engineering

**TRANSFERS TO/ADDITIONS:**

AGENCY University of Alaska  
 BRU Organized Research  
 COMMENT Geophysical Institute  
 PROJECT Seismic Monitoring

**FUNDING INFORMATION**

What is being transferred from or deleted from this unit? Why? Include PCN and position title.

The Seismic Engineering Project is being transferred to the University of Alaska to consolidate the State's Seismic Monitoring efforts. In the past this project has worked closely with the University to monitor and document earthquake activity in Alaska. This merging of the two programs will facilitate the management process and provide a measure of economy as fiscal resources decline.

AMOUNT	EXPEND. BY OBJECT	AMOUNT
(71.3)	100 Para. Service	71.3
(1.0)	200 Travel	1.0
(2.0)	300 Contractual	2.0
(0.0)	400 Supplies	0.0
	500 Equipment	
	600 Lands/Bldgs.	
	700 Grants, Claims	
	800 Miscellaneous	
(75.1)	TOTAL	75.1

What is being transferred to or added to this unit? Why? Include PCN and position title.

The Seismic Engineering Project is being transferred to the University of Alaska to consolidate the State's Seismic Monitoring efforts. In the past this project has worked closely with the University to monitor and document earthquake activity in Alaska. This merging of the two programs will facilitate the management process and provide a measure of economy as fiscal resources decline.

		I-A Transfer	
	1002	Fed. Receipts	
	1003	CF Match	
(75.1)	1004	General Fund	75.1
	1006	I-A Receipts	
		Other	
	15	PFT	
	16	PPT	
	17	Non Permanent	
	18	Staff Months	

3 2 2

CA TRANSFER WITHIN ADJUSTED BASE

AGENCY Department of Natural Resources  
 BRU Geology, Energy and Mining  
 COMMENT Land & Public Safety

Cowper 1/87

FY 88

Page 1 of 1  
 Revised Date

H-HESS  
Lisa McLanahan

STATE OF ALASKA 1987 LEGISLATIVE SESSION  
FISCAL NOTE

REQUEST: \_\_\_\_\_

Bill Version: HB54

Publish Date: \_\_\_\_\_

Revision Date: \_\_\_\_\_

Agency Affected: University of Alaska

Title: Creating Alaska Seismic Hazard Center

BRU: UAF Organized Research

Sponsor: Koponen

Components: \_\_\_\_\_

Requestor: House Hess

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92
PERSONAL SERVICES		17.0	17.5	18.0	18.6	19.1
TRAVEL		17.0	17.5	18.0	18.6	19.1
CONTRACTUAL		4.0	4.3	4.4	4.7	4.8
SUPPLIES		4.0	4.1	4.2	4.4	4.5
EQUIPMENT		2.2	22.7	23.3	24.0	24.8
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING		100.0	103.0	106.1	105.3	112.6
CAPITAL						
REVENUE						

FUNDING: (Thousands of Dollars)

GENERAL FUND	100.0	103.0	106.1	109.3	102.6
GENERAL FUNDS					
OTHER					
TOTAL					

POSITIONS:

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

ANALYSIS: (Attach a separate page if necessary)

See attached

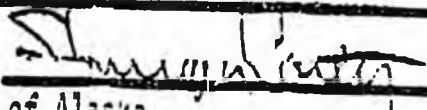
Prepared by: Brian Rogers, Director of Budget Development

Phone: 907 474-6290

Division: University of Alaska

Date: February 20, 1987

Approved by Commissioner



Date: February 20, 1987

Agency: University of Alaska

Distribution (by preparer):

- Legislative Finance
- Legislative Sponsor
- Requestor
- Office of Management and Budget
- Impacted Agency(ies)
- Senate Secretary

0128 of

CONTINUATION OF FISCAL NOTE ANALYSIS

For Bill/Resolution No. HB54

In August 1986, the UAF Geophysical Institute agreed to take over the seismic hazard program from the Alaska Department of Natural Resources. The FY88 UA budget contains \$120.5 in partial funding for this program. The additional funding contained in this fiscal note provides funding of Alaska's program for collection, recording and archiving of seismic data at an annual level equivalent to the level when the program was transferred to UAF.

02-21-30-55-00 (00-00-0-00-00-00)

STATE OF ALASKA -- COMPONENT BUDGET ANALYSIS

SALSFRMA 15:59 1/29/87

AGENCY: UNIVERSITY OF ALASKA  
CATEGORY: UNIVERSITY OF ALASKAPROGRAM: INTERIOR/WESTERN UNIV & CC  
SUB-PROGRAM: ORGANIZED RESEARCH

LEG. FIN.

\*\*\*\*\* FY87 REV ANALYSIS \*\*\*\*\*

OBJECT GROUP	VARIATION		DESCRIPTION: FY87 REV (\$37,199.6) VERSUS FY87 ATH (\$37,747.2)
01 PERS. SERV.	-1383.4	-5.1%	REDUCE 22 PFT AND 2 PPT TO ELIMINATE NEGATIVE IN MISC. BY CLOSING IMS LIBRARY, CLOSE AEIDC AS SEPERATE CENTER AND TRANSFER SOME FUNCTIONS, REDUCE AG & FORESTRY STA. RESEARCH, REDUCE LAB ASST. IN MIRL, AND REDUCE CHRDL LIBRARY <\$954.9>, TRANSFER 6 PFT AND 1 PPT TO UAF, BUT ELIMINATE FUNDS FOR POSITIONS IN OR <\$273.4>, REDUCE TEMPORARY LABOR POOLS BY TEN PERCENT TO MEET FY87 RESTRICTIONS <\$155.1>.
02 TRAVEL	-62.2	-6.6%	REDUCE TRAVEL IN ALL O/R OFFICES <\$62.2>.
03 CONTRACTUAL	-170.3	-2.3%	REDUCE SERVICES TO ELIMINATE NEGATIVE IN MISC. <627.7>, REDUCE CONTRACTS BY 5 PERCENT TO MEET FY87 RESTRICTIONS <\$142.6>.
04 COMMODITIES	-102.6	-4.9%	REDUCE SUPPLIES IN IMS LIBRARY CLOSING TO ELIMINATE NEGATIVE MISC. <\$18.7>, REDUCE SUPPLIES IN CHRDL LIBRARY TO ELIMINATE NEGATIVE MISC. <\$12.6>, REDUCE SUPPLIES BY 5 PERCENT TO MEET FY87 RESTRICTIONS <\$71.3>.
08 MISC.	1170.9	-114.2%	INCREASE TO ELIMINATE NEGATIVE IN MISCELLANEOUS \$1287.3, TRANSFER TO UAF TO MATCH PROGRAM REDUCTIONS <\$116.4>.
MM TOTALS	-547.6	-1.5%	

\*\*\*\*\* GOVERNOR'S ANALYSIS (87 REV TO 88 GOV) \*\*\*\*\*

TOTAL	GEN_FUND	OTH_FUND	PFT	PPT	DESC
276.1	276.1	0.0	0.0	0.0	RESTORE ONE-TIME 87 REDUCTIONS TO SUPPT CATEGORIE 02421
-6591.0	-1548.3	-5042.7	-67.0	-2.0	TRANSFER INST OF MARINE SCI TO NEW FISHERY COMPONENT 02318
130.5	130.5	0.0	0.0	0.0	TRANSFER SEISMIC ENGINEERING PROJECT FROM DNR 02319
0.0	0.0	0.0	0.0	0.0	CHANGE PROGRAM RECEIPT TO OTHER FUND CODE 02333

\*\*\*\*\* PROGRAM DESCRIPTION &amp; PRIOR YEAR INFORMATION \*\*\*\*\*

FY87 INTENT: IT IS THE INTENT OF THE LEGISLATURE THAT ORGANIZED RESEARCH BE ADMINISTERED THROUGH STATEWIDE ADMINISTRATION AS A STATEWIDE SERVICE.

AGENCY RESPONSE: RESEARCH IN A UNIVERSITY SHOULD BE CONDUCTED IN THE CLOSEST AND MOST PRODUCTIVE ASSOCIATION WITH FACULTY AND GRADUATE STUDENTS. AS THE UNIVERSITY STATEWIDE ADMINISTRATION HAS NEITHER FACULTY NOR STUDENTS, ORGANIZED RESEARCH FUNCTIONS ARE MOST APPROPRIATELY ADMINISTERED AT THE INDIVIDUAL UNIVERSITY LEVEL. HOWEVER, THE SYSTEMWIDE ADMINISTRATION HAD BECOME MORE ACTIVE IN SETTING DIRECTION FOR AND APPROACHES TO PRODUCTIVE RESEARCH THROUGH BOTH THE UA SYSTEM SIX-YEAR PLAN AND THE UNIVERSITY RESTRUCTURING PLAN.

FY87 INTENT: IT IS THE INTENT OF THE LEGISLATURE THAT THE K. M. RAE CENTER IN SEWARD REMAIN OPEN AND CONTINUE TO OPERATE DURING JULY AND AUGUST, 1986 AND DURING MAY AND JUNE, 1987.

TRANSFERS FROM/DELETIONS:		FUNDING INFORMATION	TRANSFERS TO/ADDITIONS:	
AGENCY BRU NCHEMS	DEPARTMENT OF NATURAL RESOURCES GEOLOGY, ENERGY & MINING		AGENCY BRU NCHEMS	UNIVERSITY OF ALASKA ORGANIZED RESEARCH RESEARCH
<p>What is being transferred or deleted from this unit? Why? Include PCN and position title.</p> <p>The Seismic Engineering Project is being transferred to the University of Alaska to consolidate the State's Seismic Monitoring efforts. In the past this project has worked closely with the University to monitor and document earthquake activity in Alaska. This merging of the two programs will facilitate the management process and provide a measure of economy as fiscal resources decline.</p>	AMOUNT	EXPEND. BY OBJECT	AMOUNT	<p>What is being transferred or added to this unit? Why? Include PCN and position title.</p> <p>The Seismic Engineering Project is being transferred to the University of Alaska to consolidate the State's Seismic Monitoring efforts. In the past this project has worked closely with the University to monitor and document earthquake activity in Alaska. This merging of the two programs will facilitate the management process and provide a measure of economy as fiscal resources decline.</p> <p>This transfer will provide funding for position 29651, which is funded with restricted funds in FY87. No other positions or additional months will be added.</p>
	(81.3)	Personal Services	81.3	
	(2.0)	Travel	2.0	
(46.4)	Contractual	46.4		
(0.8)	Supplies	0.8		
	Equipment			
	Lands, Buildings			
	Grants, Claims			
	Miscellaneous			
(130.5)	TOTAL	130.5		
	I-A Trans. (Non-Add)			
	Federal Receipts			
(130.5)	General Fund Match	130.5		
	General Fund			
	I-A Receipts			
	Program Receipts			
	Interest Income			
	Student Fees			
	Ind. Cost Recovery			
	Other Rest. Receipts			
	CIP Receipts			
	PFT			
	PPT			
	Non Permanent			
	Staff Months			

AGENCY UNIVERSITY OF ALASKA  
BRU ORGANIZED RESEARCH

FY88

CA TRANSFER WITHIN  
ADJUSTED BASE

08-Jan-87

2319

PROJECT NUMBER	PROJECT TITLE	PRIOR YEAR FY 86 ACTUAL		CURRENT YEAR FY 87 AUTHORIZED										FY 88 REQUEST		GOVERNOR'S BUDGET	
		GENERAL FUNDS	TOTAL	GENERAL FUNDS	TOTAL	FY 87 REVISED		FY 88 TRANSFERS		FY 88 DECREMENTS		FY 88 INCREMENTS		GENERAL FUNDS	TOTAL	GENERAL FUNDS	TOTAL
						GENERAL FUNDS	TOTAL	GENERAL FUNDS	TOTAL	GENERAL FUNDS	TOTAL	GENERAL FUNDS	TOTAL				
98	Archaeological Surveys			250.0	250.0	212.5	212.5	(212.5)	(212.5)					0.0	0.0		
99	Archaeological RSA				470.6		470.6		(470.6)					0.0	0.0		
100	Statewide Engineering Geology			302.0	302.0	283.6	283.6	65.9	65.9	(49.4)	(49.4)			300.1	300.1	300.1	300.1
101	Seismic Engineering		✓	115.7	115.7	75.1	75.1	(75.1)	(75.1)					0.0	0.0		
102	Statewide Seismic Monitoring		✓	66.4	66.4	56.4	56.4			(56.4)	(56.4)			0.0	0.0		
103	Interagency Technical Support			704.3	704.3	595.0	595.0	(470.7)	(470.7)	(124.3)	(124.3)			0.0	0.0		
104	Federal Receipts Land/ Public Safety				97.0		97.0								97.0		97.0
105	Coastal Marine Boundary			316.8	316.8	296.8	296.8	358.9	358.9	(50.8)	(50.8)		105.4	604.9	710.3	604.9	604.9
106	District Survey			59.4	59.4	14.4	14.4			(14.4)	(14.4)			0.0	0.0		
107	Survey Coordination			337.3	337.3	288.3	288.3	(288.3)	(288.3)					0.0	0.0	0.0	0.0
108	Survey Operations			293.4	293.4	256.4	256.4	(71.0)	(71.0)	(30.0)	(30.0)		794.5	155.4	949.9	155.4	155.4
TOTAL																	

0120X

P1 PROJECT LISTING

AGENCY Department of Natural Resources

(SRU) Geology, Energy and Mining

(FUNCTION) Land &amp; Public Safety

Comper 1/87

Page 1 of 2

Revised Date

FY 88

STATE OF ALASKA  
DIVISION OF BUDGET REVIEW

DATE: 01/28/87  
TIME: 14:38:36  
PROG: OPRRPT9

GOVERNOR'S FY '88 OPERATING BUDGET REQUEST COMPONENT SUMMARY

AGENCY: DEPARTMENT OF NATURAL RESOURCES  
COMPONENT: LAND AND PUBLIC SAFETY

BUDGET REQUEST UNIT: GEOLOGY, ENERGY AND MINING

\*\*\*\*\* COMPARISON OF AGENCY BUDGET SUBMISSION TO GOVERNOR'S REQUEST, BY IMPACT ITEM \*\*\*\*\*

DESCRIPTION	REF NUM	TRANS TYPE	PROPOSED BY	AGENCY SUBMISSION					GOVERNOR'S REQUEST				
				PFT	PPT	TOTAL	GEN FUND	OTH FUNDS	PFT	PPT	TOTAL	GEN FUND	OTH FUNDS
FY '87 REVISED AUTHORIZATION				29.0	12.0	2,646.1	2,078.5	567.6	29.0	12.0	2,646.1	2,078.5	567.6
Transfer to provide ANWR Support	1515	TROUT	AGENCY	-1.0	0.0	-45.9	-45.9	0.0	-1.0	0.0	-45.9	-45.9	0.0
Transfer Publication Spec. to Land and Water	1516	TROUT	AGENCY	-1.0	0.0	-41.6	-41.6	0.0	-1.0	0.0	-41.6	-41.6	0.0
Transfer Archaeology function to Parks	1517	TROUT	AGENCY	-2.0	-5.0	-683.1	-212.5	-470.6	-2.0	-5.0	-683.1	-212.5	-470.6
Consolidate publications/information function	1518	TRIN	AGENCY	4.0	0.0	182.7	182.7	0.0	4.0	0.0	182.7	182.7	0.0
Transfer Seismic Engineering project to University	1519	ATROUT	AGENCY	0.0	0.0	-75.1	-75.1	0.0	0.0	0.0	-75.1	-75.1	0.0
Seismic Monitoring One-Time Item	2008	OTI	AGENCY	0.0	0.0	-56.4	-56.4	0.0	0.0	0.0	-56.4	-56.4	0.0
Juneau Surveyor position	2047	DEC	AGENCY	0.0	-1.0	-14.4	-14.4	0.0	0.0	-1.0	-14.4	-14.4	0.0
Reduce technical support divisions	2049	DEC	AGENCY	-3.0	-1.0	-124.3	-124.3	0.0	-3.0	-1.0	-124.3	-124.3	0.0
Engineering Geology position	2060	DEC	AGENCY	0.0	-1.0	-49.4	-49.4	0.0	0.0	-1.0	-49.4	-49.4	0.0
Downgrade land disposal surveyor	2089	DEC	AGENCY	-1.0	1.0	-30.0	-30.0	0.0	-1.0	1.0	-30.0	-30.0	0.0
Coastal Marine Boundary Surveyor	2090	DEC	AGENCY	-1.0	0.0	-50.8	-50.8	0.0	-1.0	0.0	-50.8	-50.8	0.0
Downgrade Etkes Mining Info positions	2092	DEC	AGENCY	-3.0	3.0	-53.9	-53.9	0.0	-3.0	3.0	-53.9	-53.9	0.0
Add AK Power Auth RSA receipts	2114	INC	AGENCY	0.0	2.0	288.3	0.0	288.3	0.0	2.0	288.3	0.0	288.3
Convert Survey Operation to Prgn Rcpts	2117	INC	AGENCY	7.0	0.0	476.3	0.0	476.3	0.0	0.0	0.0	0.0	0.0
Provide prior land disposal survey needs	2118	INC	AGENCY	5.0	1.0	282.0	0.0	282.0	0.0	0.0	0.0	0.0	0.0
Add Coastal Emery/SW Platting funding	2119	INC	AGENCY	0.0	0.0	141.6	0.0	141.6	0.0	0.0	0.0	0.0	0.0
*** COMPONENT TOTALS ***				33.0	11.0	2,792.1	1,506.9	1,285.2	21.0	10.0	1,892.2	1,506.9	385.3

→ Inlet change CIP

115.7  
 (40.6)  
 75.1

TITLE OF INCREMENT/DECREMENT:	AGENCY CONTACT/PHONE NUMBER:	CODE	EXPENDITURE BY OBJECT	AGENCY REQ.	GOV'S REQ.
15% Reduction	John Davies 474-6166	100	Personal Services		
DESCRIBE WHY THIS INCREMENT/DECREMENT IS NEEDED AND WHAT IT PURCHASES:  At the reduced level only support for the seismologist in charge of the project is provided. No state support of installation of accelerographs can be provided. No support of seismic stations around the state can be provided.		200	Travel	(0.5)	
		300	Contractual Services	(37.7)	
		400	Supplies	(2.4)	
		500	Equipment		
		600	Lands, Buildings, Etc.		
		700	Grants, Claims, Etc.		
		800	Miscellaneous		
		TOTAL		(40.6)	
		I-A Transfer (NON-ADD)			
		1002	Federal Receipts		
		1003	General Fund Match		
		1004	General Fund	(40.6)	
		1006	I-A Receipts		
			Other		
POSITION INFORMATION <input type="checkbox"/> PFT <input type="checkbox"/> PPT <input type="checkbox"/> Non Permanent <input type="checkbox"/> Staff Months		<input type="checkbox"/> Enhance Existing Service Compared to FY 87 <input type="checkbox"/> New Service Compared to FY 87 <input type="checkbox"/> Continuation of FY 87 Service Level		<input type="checkbox"/> Formula Program	
		IMPACT FROM CAPITAL PROJECT (NAME) _____			
		Chapter _____ SLA _____ Page/Line _____			

C5 INCREMENT/DECREMENT REQUEST  Agency Priority _____ of _____	AGENCY <u>Department of Natural Resources</u>
	BRU <u>Geology, Energy and Mining</u>
	COMPONENT <u>Land &amp; Public Safety</u>
	PROJECT <u>Seismic Engineering</u>

**FY87 REVISED**

FY 88

Page 1 of 1
Revised Date _____

**TRANSFERS FROM/DELETIONS:**

AGENCY Department of Natural Resources  
 BRU Geology, Energy and Mining  
 COMPONENT Land & Public Safety  
 PROJECT Seismic Engineering

**FUNDING INFORMATION**

**TRANSFERS TO/ADDITIONS:**

AGENCY University of Alaska  
 BRU Organized Research  
 COMPONENT Geophysical Institute  
 PROJECT Seismic Monitoring

What is being transferred from or deleted from this unit? Why? Include PCN and position title.

The Seismic Engineering Project is being transferred to the University of Alaska to consolidate the State's Seismic Monitoring efforts. In the past this project has worked closely with the University to monitor and document earthquake activity in Alaska. This merging of the two programs will facilitate the management process and provide a measure of economy as fiscal resources decline.

AMOUNT	EXPEND. BY OBJECT	AMOUNT
(71.3)	100 Pers. Service	71.3
(1.0)	200 Travel	1.0
(2.0)	300 Contractual	2.0
(0.8)	400 Supplies	0.8
	500 Equipment	
	600 Lands/Bldgs.	
	700 Grants, Claims	
	800 Miscellaneous	
(75.1)	TOTAL	75.1
	I-A Transfer	
	1002 Fed. Receipts	
	1003 CF Hatch	
(75.1)	1004 General Fund	75.1
	1006 I-A Receipts	
	Other	
	15 PFT	
	16 PPI	
	17 Non Permanent	
	18 Staff Months	

What is being transferred to or added to this unit? Why? Include PCN and position title.

The Seismic Engineering Project is being transferred to the University of Alaska to consolidate the State's Seismic Monitoring efforts. In the past this project has worked closely with the University to monitor and document earthquake activity in Alaska. This merging of the two programs will facilitate the management process and provide a measure of economy as fiscal resources decline.

CA TRANSFER WITHIN ADJUSTED BASE

AGENCY Department of Natural Resources  
 BRU Geology, Energy and Mining  
 COMPONENT Land & Public Safety

Cowper 1/87

FY 88

Page 1 of 1  
 Revised Date

<b>TITLE OF INCREMENT/DECREMENT:</b> Line Item Spread	<b>AGENCY CONTACT/PHONE NUMBER:</b> John Davies 474-6166	<b>CODE</b>	<b>EXPENDITURE BY OBJECT</b>	<b>AGENCY REQ.</b>	<b>GOV'S REQ.</b>																		
<b>DESCRIBE WHY THIS INCREMENT/DECREMENT IS NEEDED AND WHAT IT PURCHASES:</b>  This increment/decrement spreads the special appropriation, Ch 130, Sec 212, for St. Augustine and maintenance of the Statewide Seismic Monitoring System to the appropriate line items.  <table style="margin-left: 40px;"> <tr><td>Appropriation</td><td style="text-align: right;">83.0</td></tr> <tr><td>Veto</td><td style="text-align: right;"><u>16.6</u></td></tr> <tr><td>Balance</td><td style="text-align: right;">66.4</td></tr> </table>  <table style="margin-left: 40px;"> <tr><td>100</td><td></td></tr> <tr><td>200</td><td style="text-align: right;">12.3</td></tr> <tr><td>300</td><td style="text-align: right;">49.4</td></tr> <tr><td>400</td><td style="text-align: right;">4.7</td></tr> <tr><td>800</td><td style="text-align: right;"><u>        </u></td></tr> <tr><td>TOTAL</td><td style="text-align: right;">66.4</td></tr> </table>		Appropriation	83.0	Veto	<u>16.6</u>	Balance	66.4	100		200	12.3	300	49.4	400	4.7	800	<u>        </u>	TOTAL	66.4	100	Personal Services		
		Appropriation	83.0																				
		Veto	<u>16.6</u>																				
		Balance	66.4																				
		100																					
		200	12.3																				
		300	49.4																				
		400	4.7																				
		800	<u>        </u>																				
		TOTAL	66.4																				
		200	Travel	12.3																			
		300	Contractual Services	49.4																			
		400	Supplies	4.7																			
		500	Equipment																				
		600	Lands, Buildings, Etc.																				
700	Grants, Claims, Etc.																						
800	Miscellaneous	(66.4)																					
<b>TOTAL</b>		<b>0.0</b>																					
<b>I-A Transfer (NON-ADD)</b>																							
1002	Federal Receipts																						
1003	General Fund Match																						
1004	General Fund																						
1006	I-A Receipts																						
	Other																						
<b>POSITION INFORMATION</b>		PFT																					
		PPT																					
		Non Permanent																					
		Staff Months																					
		<input type="checkbox"/> Enhance Existing Service	<input type="checkbox"/> Formula Program																				
		<input type="checkbox"/> Compared to FY 87																					
		<input type="checkbox"/> New Service Compared to FY 87																					
		<input type="checkbox"/> Continuation of FY 87																					
		<input type="checkbox"/> Service Level																					
<b>IMPACT FROM CAPITAL PROJECT (NAME)</b>																							
_____																							
Chapter _____ SLA _____ Page/Line _____																							

C5	INCREMENT/DECREMENT REQUEST
Agency Priority _____ of _____	

AGENCY Department of Natural Resources

BRU Geology, Energy and Mining

COMPONENT Land & Public Safety

PROJECT Statewide Seismic Monitoring

**FY87 REVISED**

FY 88
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Page 1 of 1
Revised Date _____

<b>TITLE OF INCREMENT/DECREMENT:</b> 15% Reduction	<b>AGENCY CONTACT/PHONE NUMBER:</b> John Davies 474-6166	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:5%;">CODE</th> <th style="width:75%;">EXPENDITURE BY OBJECT</th> <th style="width:10%;">AGENCY REQ.</th> <th style="width:10%;">GOV'S REQ.</th> </tr> </thead> <tbody> <tr><td>100</td><td>Personal Services</td><td></td><td></td></tr> <tr><td>200</td><td>Travel</td><td>(5.0)</td><td></td></tr> <tr><td>300</td><td>Contractual Services</td><td>(5.0)</td><td></td></tr> <tr><td>400</td><td>Supplies</td><td></td><td></td></tr> <tr><td>500</td><td>Equipment</td><td></td><td></td></tr> <tr><td>600</td><td>Lands, Buildings, Etc.</td><td></td><td></td></tr> <tr><td>700</td><td>Grants, Claims, Etc.</td><td></td><td></td></tr> <tr><td>800</td><td>Miscellaneous</td><td></td><td></td></tr> <tr><td colspan="2" style="text-align: right;"><b>TOTAL</b></td><td><b>(10.0)</b></td><td></td></tr> <tr><td colspan="4">I-A Transfer (NON-ADD)</td></tr> <tr><td>1002</td><td>Federal Receipts</td><td></td><td></td></tr> <tr><td>1003</td><td>General Fund Match</td><td></td><td></td></tr> <tr><td>1004</td><td>General Fund</td><td>(10.0)</td><td></td></tr> <tr><td>1006</td><td>I-A Receipts</td><td></td><td></td></tr> <tr><td></td><td>Other</td><td></td><td></td></tr> <tr><td colspan="2" rowspan="4" style="text-align: center; vertical-align: middle;"><b>POSITION INFORMATION</b></td><td>PFT</td><td></td></tr> <tr><td>PPT</td><td></td></tr> <tr><td>Non Permanent</td><td></td></tr> <tr><td>Staff Months</td><td></td></tr> <tr> <td colspan="2" style="vertical-align: top;"> <input type="checkbox"/> Enhance Existing Service  <input type="checkbox"/> Compared to FY 87   <input type="checkbox"/> New Service Compared to FY 87   <input type="checkbox"/> Continuation of FY 87 Service Level         </td> <td colspan="2" style="vertical-align: middle; text-align: center;"> <input type="checkbox"/> Formula Program         </td> </tr> <tr> <td colspan="4"> <b>IMPACT FROM CAPITAL PROJECT (NAME)</b>  <hr/>           Chapter _____ SLA _____ Page/Line _____         </td> </tr> </tbody> </table>	CODE	EXPENDITURE BY OBJECT	AGENCY REQ.	GOV'S REQ.	100	Personal Services			200	Travel	(5.0)		300	Contractual Services	(5.0)		400	Supplies			500	Equipment			600	Lands, Buildings, Etc.			700	Grants, Claims, Etc.			800	Miscellaneous			<b>TOTAL</b>		<b>(10.0)</b>		I-A Transfer (NON-ADD)				1002	Federal Receipts			1003	General Fund Match			1004	General Fund	(10.0)		1006	I-A Receipts				Other			<b>POSITION INFORMATION</b>		PFT		PPT		Non Permanent		Staff Months		<input type="checkbox"/> Enhance Existing Service <input type="checkbox"/> Compared to FY 87  <input type="checkbox"/> New Service Compared to FY 87  <input type="checkbox"/> Continuation of FY 87 Service Level		<input type="checkbox"/> Formula Program		<b>IMPACT FROM CAPITAL PROJECT (NAME)</b> <hr/> Chapter _____ SLA _____ Page/Line _____			
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<b>IMPACT FROM CAPITAL PROJECT (NAME)</b> <hr/> Chapter _____ SLA _____ Page/Line _____																																																																																				
<b>DESCRIBE WHY THIS INCREMENT/DECREMENT IS NEEDED AND WHAT IT PURCHASES:</b>  Reductions to this project will limit the installation of monitoring devices on Mt. Augustine and throughout Southcentral Alaska. Funding is also intended to provide for the monitoring, telemetry, and analyses of the devices. At the reduced level only limited interpretation of the data is possible, primarily resulting in only archive of information obtained.																																																																																				

CS	<b>INCREMENT/DECREMENT REQUEST</b>  Agency Priority _____ of _____
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AGENCY Department of Natural Resources  
 BRU Geology, Energy and Mining  
 COMPONENT Land & Public Safety  
 PROJECT Statewide Seismic Monitoring

**FY87 REVISED**

FY 88
-------

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Revised Date _____

TITLE OF INCREMENT/DECREMENT: Reduction of One Time Items		AGENCY CONTACT/PHONE NUMBER: Udike 688-3555		CODE	EXPENDITURE BY OBJECT	AGENCY REQ.	GOV'S REQ.
DESCRIBE WHY THIS INCREMENT/DECREMENT IS NEEDED AND WHAT IT PURCHASES:  This project, Statewide Seismic Monitoring, is a one time appropriation to enhance the Seismic/Earthquake Monitoring System. It is not intended to become a part of the components adjusted base and must be decremented for FY 88.				100	Personal Services		
				200	Travel	(7.3)	(7.3)
				300	Contractual Services	(44.4)	(44.4)
				400	Supplies	(4.7)	(4.7)
				500	Equipment		
				600	Lands, Buildings, Etc.		
				700	Grants, Claims, Etc.		
				800	Miscellaneous		
				TOTAL		(56.4)	(56.4)
				I-A Transfer (NON-ADD)			
				1002	Federal Receipts		
				1003	General Fund Match		
				1004	General Fund	(56.4)	(56.4)
				1006	I-A Receipts		
					Other		
POSITION INFORMATION		PFT					
		PPT					
		Non Permanent					
		Staff Months					
<input type="checkbox"/> Enhance Existing Service		<input type="checkbox"/> Formula Program					
<input type="checkbox"/> Compared to FY 87							
<input type="checkbox"/> New Service Compared to FY 87							
<input type="checkbox"/> Continuation of FY 87 Service Level							
IMPACT FROM CAPITAL PROJECT (NAME)							
Chapter _____ SLA _____ Page/Line _____							

(5)	INCREMENT/DECREMENT REQUEST
Agency Priority _____	of _____

AGENCY Department of Natural Resources  
 BRU Geology, Energy and Mining  
 COMPONENT Land & Public Safety  
 PROJECT Statewide Seismic Monitoring

**COWPER - 1/87**

Cowper 1/87

FY 88

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Revised Date

2008

FY 88 INCREMENTS/DECREMENTS: Identify and subtotal under four groups: One-Time Items; GF Reductions; GF Increments; Non-GF and Zero Dollar Increments/Decrements; Program Receipts/GF New-Zero Increments/Decrements. Provide Grand Total at bottom.

PROJECT TITLE	100	200	300	400	500	700/800	TOTAL	GF	PFT	PPT	MONTHS
<u>One-Time Items</u>											
Statewide Seismic Monitoring			(56.4)				(56.4)	(56.4)			
SUB TOTAL			(56.4)				(56.4)	(56.4)			
<u>GF Reductions</u>											
Statewide Eng Geology	(49.4)						(49.4)	(49.4)		(1.0)	(10.0)
District Surveys	(14.4)						(14.4)	(14.4)		(1.0)	(6.0)
Interagency Tech Support	(124.3)						(124.3)	(124.3)	(3.0)	(1.0)	(23.0)
SUB TOTAL	(188.1)						(188.1)	(188.1)	(3.0)	(3.0)	(39.0)
<u>GF Reductions Cowper 1/87</u>											
Survey Operations	(30.0)						(30.0)	(30.0)	(1.0)	1.0	(6.0)
Coastal Marine Boundary	(50.8)						(50.8)	(50.8)	(1.0)		(11.0)
Resource Information	(53.9)						(53.9)	(53.9)	(3.0)	3.0	(13.0)
SUB TOTAL	(134.7)						(134.7)	(134.7)	(5.0)	4.0	(30.0)
<u>Non-GF Increments</u>											
Interagency Receipts	48.3	20.0	200.0	20.0			288.3			2.0	12.0
SUB TOTAL	48.3	20.0	200.0	20.0			288.3			2.0	12.0
<u>Program Receipts Increment</u>											
Survey Operations	413.7	25.0	19.0	18.6			476.3		7.0		84.0
Survey Operations	269.0	10.0		3.0			282.0		5.0	1.0	66.0
Coastal Marine Boundary	105.4						105.4				
Survey Operations	26.2	10.0	.	.			36.2		.	.	.
SUB TOTAL	814.3	45.0	19.0	21.6			899.9		12.0	1.0	150.0
GRAND TOTAL	539.8	65.0	162.6	41.6			809.0	(379.2)	4.0	4.0	93.0

COMPER - 1/87

C5	ADDITIONAL EXPLANATION FORM
----	-----------------------------

AGENCY Department of Natural Resources

BRU Geology, Energy and Mining

COMPONENT Land & Public Safety

Cowper 1/87

Page 1 of 1

Revised Date

FY 88

January 15, 1987

Mr. Merritt Helfferich  
Assistant Director for Administration  
Geophysical Institute  
University of Alaska  
Fairbanks, AK 99775-0800

Dear Mr. Helfferich:

The concern for the Seismic Monitoring function expressed in your November 26, 1986, letter is well founded and shared by the Department of Natural Resources. It is, and always has been, the practice of this department to honor its commitments. However, in this instance, a commitment was based on erroneous information. A brief background discussion of the issue may be useful.

Of the FY 87 operating budget appropriation for the Geology, Energy and Mining BRU, Land/Public Safety component, \$115.7 was allocated to the Seismic Engineering function. (This is the amount referenced in Pedro Denton's September 10, 1986, memorandum). Additionally, Section 212 of the Reappropriations Bill (CSHB 574) appropriated \$83.0 to the DGGS operating budget for monitoring of St. Augustine and for statewide monitoring. Section 213 provided an additional \$80.0 CIP appropriation for monitoring tsunami potential off St. Augustine. Governor Sheffield vetoed \$16.6 of the \$83.0 operating appropriation, leaving \$66.4 available for Seismic Monitoring. In July, the entire operating budget was reduced by Governor Sheffield as part of the "FY 87 Revised" budget. At that time, the Seismic Engineering operating budget allocation was reduced from \$115.7 to \$75.1, and the operating reappropriation (CSHB 574) was reduced from \$66.4 to \$56.4. (The \$80.0 CIP was completely restricted, but later made available.)

January 15, 1987

In August, 1986, an agreement was reached with the Geophysical Institute to transfer the Seismic Monitoring Program from DNR/DGGS to the University, with the following operating funding:

FY 87 Operating - Land/Public Safety Component	\$ 74.1
FY 87 Operating - Reappropriation Bill	56.4
TOTAL	<u>\$130.5</u>

(Reference Pat O'Rourke's August 27, 1986, memorandum. Additionally, please note that the agreement for \$74.1 is \$1.0 less than the allocation of \$75.1. This is due to a misunderstanding of the amount available by the DGGS representative.)

As we have since learned, the reduced reappropriation of \$56.4 is considered to be a one-time item and was not included in the department's FY 88 budget base. Unfortunately, DNR staff involved in developing the August agreement with the University was not aware of this fact. In essence, staff committed funds that were not available.

DNR has been advised by OMB that the FY 87 Operating Reappropriations Bill for \$83.0 (reduced to \$56.4 by the Governor) was a one-time item and would not be added to the budget base and could therefore not be transferred (via C-4) to the University.

In an attempt to carry through with the agreement, DNR has transferred all available Seismic Engineering funds, \$75.1 (\$1.0 more than the agreement) from the Land/Public Safety Operating budget to the Geophysical Institute. We simply cannot transfer what we do not have.

We would need to further reduce funding for other DNR projects to transfer the additional \$56.4 to the University for FY 88. I am certain you will understand that, because of the severe program cuts already proposed in our FY 88 budget, this is an action we cannot take.

In light of these circumstances, it may be necessary to change the terms of the agreement or perhaps void it entirely. I suggest that DNR and University staff meet as soon as possible to discuss this matter. If this is agreeable, please contact Laurel Murphy in Anchorage (762-2170) concerning meeting arrangements.

Mr. Merritt Helfferich

-3-

January 15, 1987

I fully understand your concerns about this matter and hope that an acceptable solution can be found.

Sincerely,

Robert D. Arnold  
Deputy Commissioner

cc: Laurel Murphy  
Dick Reger  
Virginia Stonkus

# MEMORANDUM

State of Alaska *cc RJB*

*Shannon IS*  
*HW / VS*

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF MINING & GEOLOGY

TO: Esther C. Wunnicke  
Commissioner

DATE September 10, 1986

FILE NO:

TELEPHONE NO 762-2177

FROM: Pedro Denton *PD*  
Director

SUBJECT: Transfer of Seismic  
Monitoring Program

As a result of the reduced FY 87 operating budget for the Division of Geological and Geophysical Surveys and because we anticipate that operating budgets will continue to decrease during the next few years due to sustained low oil prices, we are considering elimination of various DGGs programs. One program that was established when budgets were much larger is the Seismic Monitoring Program. Our present level of funding for this program (\$115.7) is about one-third the amount that we consider sufficient to maintain an adequate seismograph network in Alaska and to effectively coordinate seismic-monitoring efforts among the many agencies engaged in this activity. In addition, the layoff procedures recently agreed to between the State and APEA makes our ability to maintain the expertise necessary to the project very uncertain.

During the past several years, the Geophysical Institute of the University of Alaska (Fairbanks) has made important contributions in the area of seismic monitoring and engineering. This organization possesses the largest concentration of seismic specialists in the state. Discussions with Dr. Patrick O'Rourke, Chancellor of the Fairbanks campus, Dr. Juan Rhoderer, retiring Director of the Institute, and Dr. Syun Akasofu, incoming Director of the Geophysical Institute, resulted in a verbal agreement that the Geophysical Institute will accept available state funds to support maintenance of the existing seismic network for the rest of FY 87 and will provide an appropriate Research Associate position for our seismologist, John N. Davies, who will voluntarily leave DGGs and join the University staff. Our agreement also stipulates that an equivalent amount of seismic-monitoring funds will be deleted from the adjusted base for the FY 88 DMG operating budget and this amount will be added to the adjusted base of the University of Alaska (Fairbanks) operating budget. Further, it was agreed that in the future the University of Alaska Geophysical Institute will be responsible for generating funding support for seismic monitoring in Alaska and Institute personnel will accept responsibility for maintaining the existing seismograph network in Alaska and for coordinating their activities with other agencies engaged in seismic monitoring. Discussions between Dr. Akasofu and John Davies, who is presently on annual leave Outside, indicate that this arrangement is satisfactory. We are currently preparing an RSA for the balance of the project funding to complete the first step in the process of transferring the program out of DNR.

PD/lkb

cc: Dick Reger  
Randy Updike

Office of the Chancellor

UNIVERSITY OF ALASKA — FAIRBANKS  
Fairbanks, Alaska 99775-0500

## MEMORANDUM

To: Juan Roederer, Director  
Geophysical Institute

Dr. Syun-Ichi Akasofu, Director Designate  
Geophysical Institute

From: Pat O'Rourke, Chancellor *PO'R*

Subject: State Seismic Network

Date: August 27, 1986

Based on our meeting of August 26, 1986 with Dick Reiger from the State Geological Survey, it is my understanding that the university will agree to the transfer of the seismic program from the state to the Geophysical Institute provided the following funds are transferred.

1. From the State Seismic Engineering Program, \$74,100.
2. From the State Seismic Network Program, \$56,400.
3. A one-time capital appropriation for St. Augustine of \$22,000.

Regarding the last item, this may be modified by the governor's action on capital appropriations. However, for FY88, a total of \$130,500 should be transferred from the State Division of Natural Resources to the university to cover the first two elements. It is my understanding that the state would initiate an appropriate budget transfer form and provide us with a copy so that we might include it in our FY88 request. For FY87, I believe the only way the state might be able to handle this is via an RSA. Again, it would be the initiation of the state and it would cover the balance of the fiscal year recognizing that they have already spent from their appropriation certain of the salary funds.

Regarding Dr. Davies, it should be understood that he would come into the university at a salary appropriate to his background and experience. This may or may not be equal to his current state salary. The institute has the flexibility of determining the type of appointment that it wishes to make; that is research associate, faculty, APT. This determination should be made based on what the institute expects the position to do. Once an appropriate position is established and a salary level determined, it

will be necessary for us to waive our open recruitment rules because of the very special nature of the circumstances surrounding this. In essence, please consider these rules waived at this time so that we might preserve the state's commitment to the seismic program. It seems that Dr. Davies is integral to this.

PJO'R:bm

cc: Jerry Trojan, Vice Chancellor for Administration  
Betty Hoch, UAF Budget Director  
Brian Rogers, Statewide Budget Director

## MEMORANDUM

## State of Alaska

DEPARTMENT OF NATURAL RESOURCES  
 DIVISION OF MINING AND GEOLOGICAL AND GEOPHYSICAL SURVEYS

TO: Representative Niilo Koponen DATE: March 3, 1987

THRU: Richard D. Reger, Regional Manager *RR* FILE NO:  
 Division of Mining and Geology TELEPHONE NO: 474-7147

FROM: Rod Combellick, *RC* Engineering Geologist SUBJECT: House Bill 54  
 Division of Mining and Geology

This is in response to a request from your office for information regarding the need to transfer the seismic-monitoring program formerly managed by the division of mining and geology (DMG) to the University of Alaska Geophysical Institute. The DMG is no longer able to continue this program because of deep budget cuts and the resultant loss of expertise in seismology. We are concerned that the program continue because of its importance to public safety and the economic well-being of this state. As one of the most seismically active areas of the world, Alaska is under continuous threat of devastation by major earthquakes. Several potentially damaging earthquakes have occurred recently in sparsely populated areas where damage was minimal (for example, the magnitude 6.9 earthquake in the eastern Aleutian Islands February 26), but eventually there will be major earthquakes near populated areas for which we need to be prepared.

Although earthquakes cannot yet be predicted, seismic monitoring allows geoscientists to reliably identify areas of the state that are likely to be severely affected by major events in the near future and to determine their probable effects. Seismic monitoring provides the necessary data for analyzing the patterns of stress accumulation leading to major earthquakes and to identify precursor activity that often precedes a major event. Interruption or suspension of the monitoring severely degrades the database and the reliability of seismic-risk estimates.

These seismic-risk estimates are important to the construction industry as well as to public-safety and planning agencies. Without reliable estimates of earthquake risk, major facilities in seismically active areas are often overdesigned, resulting in substantial unnecessary costs. If they are underdesigned, the potential for costly damage and casualties is also high. Long-term, continuous seismic monitoring is necessary if we are to continue to improve our understanding of earthquake mechanisms in Alaska. This understanding, in turn, is crucial to our ability to help lawmakers, government officials, the construction industry, and the public act confidently and responsibly to reduce the earthquake threat.

The engineering geology section of our division uses seismologic data to determine the potential for earthquake-induced ground failures in developing areas (most of the damage in Anchorage during the 1964 earthquake was from ground failures). Without reliable estimates of the probable severity of ground shaking during an earthquake, it is difficult to determine where the shaking is likely to be strong enough to cause soil failure. We hope to continue working with the Geophysical Institute to use the seismologic data in our engineering-geology program.

The Geophysical Institute is clearly the best place for the seismic-monitoring program because of its existing capabilities in this area. Additionally, the institute is better able to preserve professional expertise in high-priority areas than is the DMG during periods of budget cutbacks. Because of state personnel rules regarding layoffs, our division often loses critical expertise in high-priority areas through the 'bumping' process (all geoscientists, including seismologists, are grouped together in the Geologist position series). Within the present revenue climate, this prevents the DMG from realistically committing itself to a long-term program requiring recently hired special expertise.

I hope that this is the information you need. Please contact us if you need any further assistance.

cc: G. Gallagher, Acting Director

J. Davies 3-5-87

p. 1

Alaska encompasses some of the most active earthquake zones and volcano chains in the world. While the degree of risk varies across the State, no region of Alaska is free of hazard from earthquakes or volcanos. Ironically, the major population centers of Alaska are concentrated in the areas of greatest hazard. We can expect, on the average, a life-threatening earthquake or volcanic eruption every four years. It is obvious to most people in Alaska that we should take reasonable precautions to protect ourselves from this ever-present danger.

What can we do? What is cost-effective? What are practical measures that the state can take to reduce the risk posed by these most awesome forces of nature?

Before we can answer these questions we must understand the threat. How many earthquakes and volcanic eruptions do we have each year? Where do they occur and how big are they? What sort of hazards are likely to accompany major earthquakes and volcanic eruptions in different settings? Researchers at the University of Alaska have studied these questions with varying levels of intensity since the first seismograph was installed on the campus at Fairbanks by Charles Bunnell in 1935. Modern seismic networks for monitoring Alaskan earthquakes and volcanic activity were installed following the Good Friday Earthquake of 1964.

We have a good idea now about where the active earthquake zones and volcanos are. We have a reasonable idea about how often large earthquakes occur in the more active zones and about how often the more active volcanos erupt. In the less active earthquake areas and for the dormant volcanos our knowledge is insufficient to specify the risk in a useful way. Even in the more active areas our ability to forecast the size of future earthquakes and volcanic eruptions is limited and our ability to forecast the time is practically nonexistent, except in certain special cases.

So what can we do? The single most important thing to do to reduce loss of both life and property is to build houses, schools, hospitals, and commercial buildings according to a standard appropriate to the local hazard. For earthquakes the most commonly used standard is the Uniform Building Code and the associated Seismic Zone Map for Alaska. The zone map divides Alaska into five geographic regions according to the level of seismic hazard; these regions are denoted 0-4, with 4 corresponding to the highest hazard. It is obviously important to map these zones correctly: if the hazard is underestimated people and property are exposed to an unnecessary risk, if it is overestimated we burden the owner with unnecessary cost of construction.

*Davis p. 2*

There are recent examples of underestimation of the hazard in the design of schools in Anchorage and Glenallen. A dramatic case of overdesign occurred a few years ago on the North Slope. An engineering firm designed two buildings for a major oil company using the standards for Zone 4. When these buildings were redesigned correctly to Zone 1 standards the savings were about one million dollars.

These examples illustrate the stakes involved in a recent proposal by a group of structural engineers in California (who write the UBC standards) to rezone Alaska in a very simplistic way, one not based on a good estimate of the earthquake hazard in Alaska. This proposed rezone would place all of SE Alaska in Zone 4, whereas it is now roughly evenly divided between Zones 2 and 3. This would add about 5 to 20 percent to the cost of all engineered construction in this region. On the other hand, the proposed rezone would place all of the Seward Peninsula region in Zone 0! This area has had many strong earthquakes, with two around magnitude 7.

ESTIMATED COST OF SEISMIC ZONE CHANGE AS PROPOSED BY SEACC

Millions of Dollars per Year

<u>Municipality</u>	<u>Zone Ch.</u>	<u>% Cost Inc.</u>	<u>An. Const.</u>	<u>An. Impact</u>
Ketchikan	2 -> 4	15%	11	1.05
Juneau	2 -> 4	15%	15	2.25
Fairbanks	3 -> 4	5%	50	2.50
TOTAL			76	6.40

MEMO February 16, 1987

TO: Niilo Koponen and Mike Davis

FROM: John Davies

SUBJECT: Background for HB 54

Background: In 1981 I was hired by DGGG to create a Seismic Hazards Mitigation Program. In February, 1982 DGGG sponsored a workshop in Wasilla to suggest the scope of such a program. Resolution 1 from that workshop called for DGGG to establish a seismic program to:

- a) Ensure the operation of a statewide seismographic network, including instrumentation to record strong ground motion in areas of significant earthquake potential;
- b) Establish a statewide seismic-data center; and
- c) Coordinate the collection and dissemination of seismic data for Alaska.

In July of 1983 the Governor signed into law HB 379 which established a seismic hazard program within DNR. The projects specifically outlined in the proposed objectives for HB 379(1983) were:

- 1) Cook Inlet - Seismic Network;
- 2) Interior Alaska Seismic Network;
- 3) Stations in SE, SC, and SW Alaska;
- 4) Seismic Instrumentation in Anchorage Buildings;
- 5) Cook Inlet Volcano Observatory;
- 6) Alaska Seismological Data Center; and
- 7) Engineering Geological Studies in Municipal Areas

The total budget proposed for these projects was \$503K. \$300K was approved for FY 84.

In August of 1986 the UAF and the Institute agreed to take over the seismic hazard program from DGGG, effective October 1, 1986 I resigned from DGGG and was hired as a research associate by the Institute. After my arrival here Lynn, Merritt, Mike Davis, Niilo Koponen and I met to discuss how to fund the program at UAF. We agreed that legislation or

an executive order would be required to "create" the program at UAF and to eliminate any resulting duplication in the DNR statutes. Syun coordinated this with O'Rourke and they agreed that we would seek line-item funding for the program. Mike Davis and Milla Koponen drafted a proposed bill to establish an "Alaskan Seismic Hazard Center" at UAF and to delete responsibility for the collection, recording and archiving of seismic data by DNR.

The question was raised as to exactly what did DGGG intend to transfer to the UAF. To resolve this issue Merrill and I met with Pedro Denton (then Director of DGGG) and Dick Reger in October. We asked them if the understanding that Syun had communicated to us was correct; i.e., DGGG intended to transfer to us not only the money for seismic monitoring in the restricted sense, but also the responsibility for the state of Alaska for seismic hazards mitigation in the larger sense. This was correct, they only asked that they be allowed to have early input on the language of any proposed legislation since they wished to retain statutory responsibility for certain geological aspects of seismic hazard mitigation. We agreed to a division of responsibility whereby we would in general restrict ourselves to seismological aspects and they would focus on geological aspects. The details of who will do what can be left to an MOU.

Budget: The history of State of Alaska Support for DNR seismic hazard mitigation is summarized in the following table:

FISCAL YEAR	AUTHORIZED BUDGET	EFFECTIVE BUDGET	NOTES
82	\$ 59K	\$ 59K	a
83	108	108	
84	300	560	b
85	440	444	b, c
86	256	230	c
87	116	104	c, d
88	(75)	(54)	e, f

- Notes:
- a) partial year
  - b) salary in Eng. Geol.
  - c) minus 10% internal overhead
  - d) later further reduced to 74K
  - e) proposed DNR C-4 transfer to UAF
  - f) adjusted for GI 40% overhead

The total budget proposed for FY 88 is as follows:

C-4 transfer from DNR	130,000
new general fund money	100,000
capital re-appropriation	30,000
<b>TOTAL</b>	<b>310,000</b>

Proposed Budget for The Alaska Earthquake and Volcanic Hazards Assessment Project

February 16, 1987

TASK A Maintain Remote Seismic Stations

	Operating	Capital
Fairbanks VHF (8 @ 1200)	9,000	
Fairbanks local (2 @ 250)	500	
Northern AK (3 @ 500)	1,500	
Highway sys. (20 @ 500)	5,000	30,000
Cook Inlet/Aug. (12 @ 2000)	24,000	
Kodiak (9 @ 2,500)	22,500	20,000
Staff Benefits	2,800	
Juneau (3 @ 1000)	<u>3,000</u>	<u>30,000</u>
Subtotal A	68,300	80,000

TASK B Maintain Seismic Lab/Process Routine Data

Supervisor (3mo @ 4800)	14,400
Programmer (3mo @ 3200)	9,600
Grad. Student (12mo @ 1850)	22,200
Electronics (4mo @ 7500)	30,200
Staff Benefits (@ 19%)	4,600
Supplies	12,000
Software maint.	9,000
Hardware maint.	<u>14,400</u>
Subtotal B	116,400

TASK C Seismic and Volcanic Hazard Analysis

Seismologist (6mo @ 4500)	27,000
Travel	6,000
Supplies, services	5,000
Staff benefits	<u>5,500</u>
Subtotal C	45,300

TOTAL (A-C) 230,000

Alaska State Legislature  
Representative Niilo Koponen

*Niilo Koponen*

Pouch V  
Juneau, Alaska 99811  
(907) 465-4992

542 4th Avenue, Suite C  
Fairbanks, Alaska 99701  
(907) 456-8161

MEMORANDUM

TO: HONORABLE AL ADAMS, CHAIR HOUSE FINANCE  
FROM: REPRESENTATIVE NIILLO KOPONEN  
DATE: FEBRUARY 24, 1987  
RE: HB 54 "AN ACT CREATING AN ALASKA EARTHQUAKE AND  
VOLCANO HAZARDS ASSESSMENT PROJECT"

I would appreciate it if you would schedule HB 54 at your earliest convenience.

The purpose of this legislation is to ensure that the State of Alaska maintains a viable seismographic network to record Alaska's earthquake and volcanic eruptions, by establishing the Alaska earthquake and volcanic hazards assessment project within the University of Alaska's Geophysical Institute's seismology program.

HB 54 amends AS.14.40 (University of Alaska and Community Colleges) by adding the Alaska Earthquake and Volcanic Hazards Assessment project within the University. AS.41.08.020 (Geological and Geophysical Survey) will maintain it's same responsibilities except for section (6) which will now read "collect, evaluate and distribute geologic data on seismic events and engineering geology of the state.

HB 54 does carry a fiscal note for the operation of this project. The Department of Natural Resources will be transferring monies over to this program to help offset the program costs. The House Health Education and Social Services Committee has attached a letter of intent that a request be made for federal monies from the Federal Earthquake Hazards Reduction Act of 1977 in order to match the state funding level for this program.

I have enclosed backup material. If you need any further information on this bill, please contact me or my staff assistant, Shari Paul.

**Proposed Budget for The Alaska Earthquake and Volcanic Hazards Assessment Project**

February 16, 1987

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	Operating	Capital
Fairbanks VHF (6 @ 1500)	9,000	
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Office of the Chancellor

UNIVERSITY OF ALASKA — FAIRBANKS  
Fairbanks, Alaska 99775-0500

## MEMORANDUM

To: Juan Roederer, Director  
Geophysical Institute

Dr. Syun-Ichi Akasofu, Director Designate  
Geophysical Institute

From: Pat O'Rourke, Chancellor *PGO R.o.*

Subject: State Seismic Network *PGO R.o.*

Date: August 27, 1986

Based on our meeting of August 26, 1986 with Dick Reiger from the State Geological Survey, it is my understanding that the university will agree to the transfer of the seismic program from the state to the Geophysical Institute, provided the following funds are transferred.

1. From the State Seismic Engineering Program, \$74,100.
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will be necessary for us to waive our open recruitment rules because of the very special nature of the circumstances surrounding this. In essence, please consider these rules waived at this time so that we might preserve the state's commitment to the seismic program. It seems that Dr. Davies is integral to this.

PJO'R:bm

cc:

Jerry Trojan, Vice Chancellor for Administration  
Retty Hoch, UAF Budget Director  
Brian Rogers, Statewide Budget Director

Introduced: 1/19/87  
 Referred: Health, Education &  
 Social Services and Finance

1 IN THE HOUSE

BY KOPONEN

2

HOUSE BILL NO. 54

3

IN THE LEGISLATURE OF THE STATE OF ALASKA

4

FIFTEENTH LEGISLATURE - FIRST SESSION

5

A BILL

6 For an Act entitled: "An Act creating the Alaska Seismic Hazard Center."

7 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

8 \* Section 1. FINDINGS. The legislature finds that the systematic  
 9 collecting, recording, evaluation, archiving, and distribution of data on  
 10 seismic events and engineering geology, and the identification of potential  
 11 seismic hazards throughout the state are in the public interest and neces-  
 12 sary to orderly, safe, and cost-effective economic development.

13 \* Sec. 2. AS 14.40 is amended by adding a new section to read:

14 Sec. 14.40.075. ESTABLISHMENT OF ALASKA SEISMIC HAZARD CENTER.

15 (a) The University of Alaska shall establish an Alaska Seismic Hazard  
 16 Center within an appropriate unit of the university. The adminis-  
 17 tration and management of the center is under the direction of a  
 18 university employee designated the "state seismologist."

19 (b) The Alaska Seismic Hazard Center shall

20 (1) collect, record, evaluate, archive, and distribute data  
 21 on seismic events and engineering geology of the state;

22 (2) conduct geological and geophysical surveys to determine  
 23 potential seismic hazards to buildings, roads, bridges, and other  
 24 installations and structures;

25 (3) identify potential seismic hazards that may affect  
 26 development in the state; and

27 (4) inform public officials and industry of potential  
 28 seismic hazards that may affect development in the state.

29 (c) The Alaska Seismic Hazard Center may enter into cooperative

1 agreements with federal, state, and local government agencies, foun-  
2 dations, universities, businesses, and other organizations engaged in  
3 seismic hazard research and services.

4 \* Sec. 3. AS 41.08.017(b) is amended to read:

5 (b) Systematic [COLLECTING, RECORDING,] evaluation [, ARCHIVING]  
6 and distribution of data on seismic events and engineering geology,  
7 and identification of potential seismic hazards throughout the state  
8 are in the public interest and necessary to orderly, safe, and cost-  
9 effective development [IN THE STATE].

10 \* Sec. 4. AS 41.08.020(b) is amended to read:

11 (b) In addition, the division of geological and geophysical  
12 surveys shall:

13 (1) collect, record, evaluate, and distribute data on the  
14 quantity, quality, and location of underground, surface, and coastal  
15 water of the state;

16 (2) publish or have published data on the water of the  
17 state;

18 (3) require the filing with it of the results and findings  
19 of surveys of water quality, quantity, and location;

20 (4) require of water well contractors, the filing with it  
21 of basic water and aquifer data normally obtained, including but not  
22 limited to well location, estimated elevation, well driller's logs,  
23 pumping tests and flow measurements, and water quality determinations;

24 (5) accept and spend funds for the purposes of this sec-  
25 tion, AS 41.08.017, and 41.08.035 and enter into agreements with  
26 individuals, public or private agencies, communities, private indus-  
27 try, state agencies, and agencies of the federal government;

28 (6) [COLLECT, RECORD,] evaluate [, ARCHIVE] and distribute  
29 data on seismic events and engineering geology of the state;

1                   (7) identify potential seismic hazards that might affect  
2                   development in the state;

3                   (8) inform public officials and industry about potential  
4                   seismic hazards that might affect development in the state.