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CHAIRMAN'S INFORMATION: SB 253

- 1) BILL TITLE: "An act relating to physical agents"
 - a) Introduced: Josephson, Fahrenkamp, V.Fischer, Rodey, and Sturgulewski;
 - b) Co-sponsors:

- 2) INTENT: This measure expands the "worker right to know law" by including "physical agents" among the list of those hazards which employers must inform employees of. The department of Labor will be required to provide posters and information fact sheets to employers for the education of their employees. Additionally, safety training will be required before new employees become exposed to physical agents in the work place.

Department of Labor would propose an amendment to Sen Joes version of this bill concerning the definition of "being exposed to" as contained within House version.

FISCAL NOTE: 0

N.B. NO EFFECTIVE DATE CLAUSE

- 3) ADDITIONAL REFERRALS: Finance, Rules

- 4) PUBLIC HEARINGS:
 - a) Sponsor:
 - b) Public Witnesses:

- 5) BILL ACTION:
 - a) Hold in committee?
 - b) Assign to sub committee for further review?
 - c) Move from committee?
 - d) Close public hearings?

6) COMMITTEE ACTION?

- a) amendments?
- b) CS adoption?

SB 253/HB 319 Harmful Physical Agents

In 1983, the Alaska Legislature passed a Worker Right to Know Law, which required employers to train workers who are exposed to toxic substances and to post signs and provide upon request materials to inform workers of health hazards.

SB 253/HB 319, an act relating to physical agents, extends the original legislation to include posting and training requirements for harmful physical hazards in the workplace. Many workers in Alaska are exposed to harmful physical agents such as ionizing and non-ionizing radiation, extreme cold and heat, noise, lasers, and hand and arm vibration. These hazards have the capacity to cause acute as well as chronic, irreversible health effects.

* NOISE. Hearing loss due to noise is America's number one non-fatal health problem. Hearing loss can be prevented by training workers to wear protective gear and by keeping exposure to a minimum.

* HEAT. Exposure to excess heat in the work environment can cause heat exhaustion, dehydration, heat cramps and heat strokes. Employee education informs employees of proper clothing and work practices, and water and salt replacement.

* VIBRATION. Use of vibrating tools over extended periods of time can cause circulatory symptoms, numbness and blanching of fingertips. Engineering controls, medical surveillance, and personal protective equipment could help reduce hazards due to vibrating hand tools.

* NON IONIZING RADIATION. Exposure to non-ionizing radiation such as ultraviolet, microwave, radiofrequency, infrared, and laser radiation can cause adverse effects on skin, eyes, and in some cases the central nervous system.

- Infrared radiation can cause damage to the retina, iris and lens of the eye

- Lasers can also cause damage to the eye and excessive exposure can cause severe burns and damage to skin and underlying organs

- Radiofrequency and microwave radiation can cause tissue heating, immunologic changes, cataract, and central nervous system effects

Workers should be made aware of potential non-ionizing radiation hazards through warning notices and protective gear should be worn at all times.

* COLD. Exposure to extremely cold weather can cause frost bite and hypothermia. Proper clothing and training can help prevent over-exposure to the cold.

* IONIZING RADIATION. Exposure to ionizing radiation such as x-rays and gamma rays can cause cancer and also may cause mutations in reproductive cells. Exposure can be prevented through shielding some types of radiation, wearing protective clothing, using properly filtered eye protection and utilizing detection devices.

As is true with toxic chemicals, proper training and protection for workers can prevent exposure and also illness due to harmful physical agents. The Alaska Environmental Lobby supports SB 253 and HB 319 as a necessary addition to Alaska's Worker Right to Know Law.

Issue Paper #4 prepared by Marilyn Heiman for the AEL 4/9/85

WORKER RIGHT TO KNOW AMENDMENTS (SB 253)

The attached bill, introduced Monday, March 25, amends the "worker right to know" statute to include physical agents with other toxic and hazardous substances about which employers must inform their employees.

The existing statute (AS 18.60) directs the Department of Labor to prepare for employers, information data sheets on hazardous and toxic materials to which employees may be exposed in the workplace. Information which is compiled by the Department is transmitted to the workers through the employers, includes: description of the substantiated effects of the substance, known threshold levels where effects occur, activities and situations where the substances are encountered and practices, technology and preventative measures which are available to the workers which will reduce or eliminate the negative impacts of the substance.

These notification and educational efforts, organized by the Department were instituted with the enactment of the right to know legislation (SB 79) in 1983 which was supported by industry, labor, environmental and health groups and interests.

Physical agents, which would be subject to these informational requirements with passage of these amendments, are those identified by the American Conference of Governmental Industrial Hygienists (ACGIH) and include:

- Ionizing radiation (X-ray)
- Heat and Cold Stress
- Impulsive and Impact Noise
- Radiofrequency, microwave, ultraviolet, and infrared radiation
- Lasers
- Hand-arm (segmented) vibration

Physical agents often are not recognized as dangerous substances. With enactment of this bill's amendments industrial accidents will be reduced in number and severity. For example, accidents such as the microwave exposure at Clear Air Force Station may be avoided if workers are better informed of the substances to which they may be exposed and are aware of preventative and safety precautions. Many occupations are not readily associated with exposure to dangerous levels of physical agents. Welders and pipefitters for example are often exposed to hazardous exposures of ionizing radiation (x-rays) when examining welds and joints.

It is anticipated there will be little or no fiscal impact as a function of these amendments to the right to know statute. The Department of Labor will essentially be editing information from national organizations relating to health and safety in the workplace, including the ACGIH, the Center for Disease Control, and Occupational Safety and Health Administration (OSHA).

**THRESHOLD LIMIT VALUES
HEAT STRESS**

These Threshold Limit Values refer to heat stress conditions under which it is believed that nearly all workers may be repeatedly exposed without adverse health effects. The TLVs shown in Table 1 are based on the assumption that nearly all acclimatized, fully clothed workers with adequate water and salt intake should be able to function effectively under the given working conditions without exceeding a deep body temperature of 38°C.^(1, 2)

Since measurement of deep body temperature is impractical for monitoring the workers' heat load, the measurement of environmental factors is required which most nearly correlate with deep body temperature and other physiological responses to heat. At the present time Wet Bulb Globe Temperature Index (WBGT) is the simplest and most suitable technique to measure the environmental factors. WBGT values are calculated by the following equations:

1. Outdoors with solar load:
 $WBGT = 0.7\text{ NWB} + 0.2\text{ GT} + 0.1\text{ DB}$

2. Indoors or Outdoors with no solar load:
 $WBGT = 0.7\text{ NWB} + 0.3\text{ GT}$
 where:

WBGT = Wet Bulb Globe Temperature Index
 NWB = Natural Wet-Bulb Temperature
 DB = Dry-Bulb Temperature
 GT = Globe Temperature

The determination of WBGT requires the use of a black globe thermometer, a natural (static) wet-bulb thermometer, and a dry-bulb thermometer.

Higher heat exposures than shown in Table 1 are permissible if the workers have been undergoing medical surveillance and it has been established that they are more tolerant to work in heat than the average worker. Workers should not be permitted to continue their work when their deep body temperature exceeds 38.0°C.

EVALUATION AND CONTROL

1. Measurement of the Environment

The instruments required are a dry-bulb, a natural wet-bulb, a globe thermometer, and a stand. The

TABLE 1
 Permissible Heat Exposure Threshold Limit Values
 (Values are given in °C, WBGT)

| Work — Rest Regimen | Work Load | | |
|-----------------------------------|-----------|----------|-------|
| | Light | Moderate | Heavy |
| Continuous work | 30.0 | 26.7 | 25.0 |
| 75% Work — 25% Rest, Each hour | 30.6 | 28.0 | 25.9 |
| 50% Work — 50% Rest, Each hour | 31.4 | 29.4 | 27.9 |
| 25% Work — 75% Rest, Each hour | 32.2 | 31.1 | 30.0 |

measurement of the environmental factors shall be performed as follows:

A. The range of the dry and the natural wet bulb thermometer shall be -5°C to 50°C with an accuracy of ±0.5°C. The dry bulb thermometer must be shielded from the sun and the other radiant surfaces of the environment without restricting the airflow around the bulb. The wick of the natural wet-bulb thermometer shall be kept wet with distilled water for at least 1/2 hour before the temperature reading is made. It is not enough to immerse the other end of the wick into a reservoir of distilled water and wait until the whole wick becomes wet by capillarity. The wick shall be wetted by direct application of water from a syringe 1/2 hour before each reading. The wick shall extend over the bulb of the thermometer, covering the stem about one additional bulb length. The wick should always be clean and new wicks should be washed before using.

B. A globe thermometer, consisting of a 15 cm. (6-inch) diameter hollow copper sphere painted on the outside with a matte black finish or equivalent, shall be used. The bulb or sensor of a thermometer (range -5°C to 100 C with an accuracy of ±0.5°C) must be fixed in the center of the sphere. The globe thermometer shall be exposed at least 25 minutes before it is read.

2. *Maximum Permissible Body Burdens and Maximum Permissible Concentrations of Radionuclides in Air and in Water for Occupational Exposure*. National Bureau of Standards Handbook 69, (June 5, 1959), with Addendum 1 (August 1963). Available as NCRP Report No. 22.

The above documents, as well as information on numerous other NCRP Reports addressing specific subjects in ionizing radiation protection are available from: NCRP Publications, PO Box 30175, Washington, DC 20014.

LASERS

The threshold limit values are for exposure to laser radiation under conditions to which nearly all workers may be exposed without adverse effects. The values should be used as guides in the control of exposures and should not be regarded as fine lines between safe and dangerous levels. They are based on the best available information from experimental studies.

Limiting Apertures

The TLVs expressed as radiant exposure or irradiance in this section may be averaged over an aperture of 1 mm except for TLVs for the eye in the spectral range of 400-1400 nm, which should be averaged over a 7 mm limiting aperture (pupil); and except for all TLVs for wavelengths between 0.1-1 mm where the limiting aperture is 10 mm. No modification of the TLVs is permitted for pupil sizes less than 7 mm.

The TLVs for "extended sources" apply to sources which subtend an angle greater than α (Table 7) which varies with exposure time. This angle is *not* the beam divergence of the source.

Correction Factors A and B (C_A and C_B)

The TLVs for ocular exposure in Tables 4 and 5 are to be used as given for all wavelength ranges. The TLVs for wavelengths between 700 nm and 1049 nm are to be increased by a uniformly extrapolated factor (C_1) as shown in Figure 2. Between 1049 nm and 1400 nm, the TLV has been increased by a factor (C_1) of five. For certain exposure times at wavelengths between 550 nm and 700 nm, correction factor (C_n) must be applied.

The TLVs for skin exposure are given in Table 6. The TLVs are to be increased by a factor (C_1) as shown in Figure 2 for wavelengths between 700 nm and 1400 nm. To aid in the determination of TLVs for exposure durations requiring calculations of fractional powers Figures 3, 4, 5 and 6 may be used.

Repetitively Pulsed Lasers

Since there are few experimental data for multiple pulses, caution must be used in the evaluation of such exposures. The protection standards for irradiance or radiant exposure in multiple pulse trains have the following limitations:

(1) The exposure from any single pulse in the train is limited to the protection standard for a single comparable pulse.

(2) The average irradiance for a group of pulses is limited to the protection standard as given in Tables 4, 5, or 7 of a single pulse of the same duration as the entire pulse group.

(3) When the Instantaneous Pulse Repetition Frequency (PRF) of any pulses within a train exceeds one, the protection standard applicable to each pulse is reduced as shown in Figure 6 for pulse durations less than 10^{-3} second. For pulses of greater duration, the following formula should be followed:

$$\text{Standard (single pulse in train)} = \frac{\text{Standard (pulse } n\tau)}{n}$$

where:

n = number of pulses in train

τ = duration of a single pulse in the train

Standard ($n\tau$) = protection standard of one pulse having a duration equal to $n\tau$ seconds.

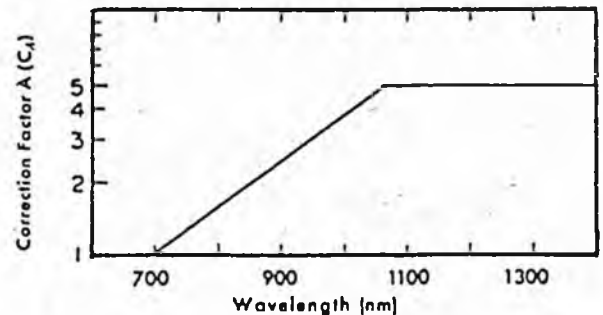


Figure 2 — TLV correction factor for $\lambda = 700 - 1400$ nm*

*For $\lambda = 700 - 1049$ nm, $C_1 = 10^{(11049 - \lambda) / 350}$
 For $\lambda = 1050 - 1400$ nm, $C_1 = 5$

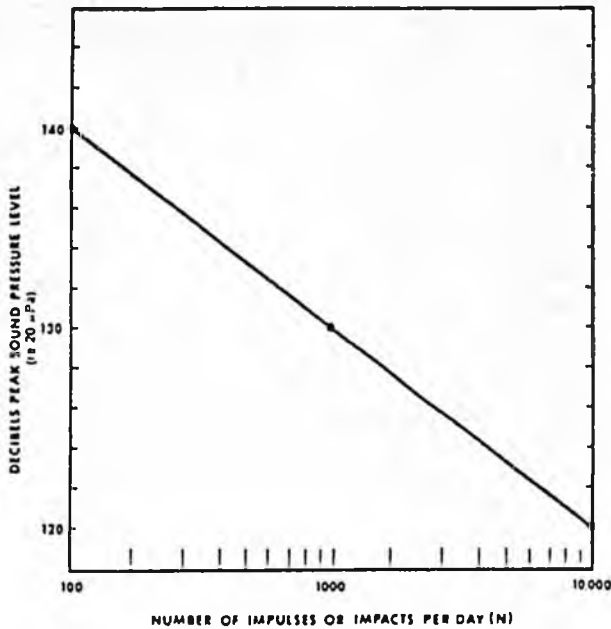


Figure 7 — Threshold Limit Values for Impulse/Impact Noise.

RADIOFREQUENCY/MICROWAVE RADIATION

These Threshold Limit Values (TLVs) refer to radiofrequency (RF) and microwave radiation in the frequency range from 10 kHz to 300 GHz, and represent conditions under which it is believed workers may be repeatedly exposed without adverse health effects. The TLVs shown in Table 10 are selected to limit the average whole body specific absorption rate (SAR) to 0.4 W/kg in any six minutes (0.1 hr) period for 3 MHz to 300 GHz, see Figure 8. Between 10 kHz and 3 MHz the average whole body SAR is still limited to 0.4 W/kg, but the plateau at 100 mW/cm² was set to protect against shock and burn hazards.

Since it is usually impractical to measure the SAR, the TLVs are expressed in units that are measurable, viz, squares of the electric and magnetic field strengths, averaged over any 0.1 hour period. This

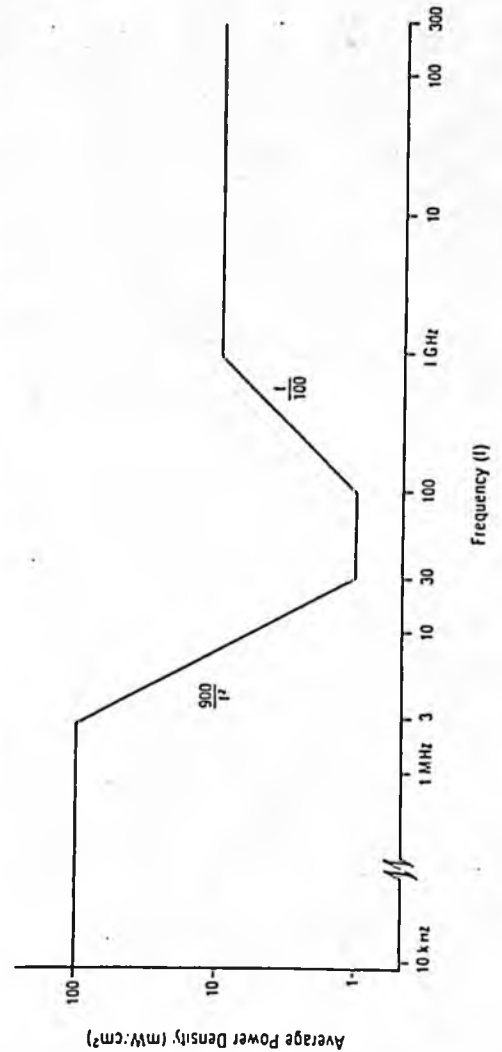


Figure 8 — Threshold Limit Values (TLV) for Radiofrequency/Microwave Radiation in Workplace (Whole Body SAR Less Than 0.4 W/kg).

TABLE 11
Relative Spectral Effectiveness
by Wavelength*

| Wavelength (nm) | TLV (mJ/cm ²) | Relative Spectral Effectiveness S _λ |
|--------------------|------------------------------|---|
| 200 | 100 | 0.03 |
| 210 | 40 | 0.075 |
| 220 | 25 | 0.12 |
| 230 | 16 | 0.19 |
| 240 | 10 | 0.30 |
| 250 | 7.0 | 0.43 |
| 254 | 6.0 | 0.5 |
| 260 | 4.6 | 0.65 |
| 270 | 3.0 | 1.0 |
| 280 | 3.4 | 0.88 |
| 290 | 4.7 | 0.64 |
| 300 | 10 | 0.30 |
| 305 | 50 | 0.06 |
| 310 | 200 | 0.015 |
| 315 | 1000 | 0.003 |

*See Laser TLVs.

TABLE 12
Permissible Ultraviolet Exposures

| Duration of Exposure Per Day | Effective Irradiance, E _{eff} (μW/cm ²) |
|------------------------------------|---|
| 8 hrs. | 0.1 |
| 4 hrs. | 0.2 |
| 2 hrs. | 0.4 |
| 1 hr. | 0.8 |
| 30 min. | 1.7 |
| 15 min. | 3.3 |
| 10 min. | 5 |
| 5 min. | 10 |
| 1 min. | 50 |
| 30 sec. | 100 |
| 10 sec. | 300 |
| 1 sec. | 3,000 |
| 0.5 sec. | 6,000 |
| 0.1 sec. | 30,000 |

4. Permissible exposure time in seconds for exposure to actinic ultraviolet radiation incident upon the unprotected skin or eye may be computed by dividing 0.003 J/cm² by E_{eff} in W/cm². The exposure time may also be determined using Table 12 which provides exposure times corresponding to effective irradiances in μW/cm².
5. All the preceding TLVs for ultraviolet energy apply to sources which subtend an angle less than 80°. Sources which subtend a greater angle need to be measured only over an angle of 80°.

Conditioned (tanned) individuals can tolerate skin exposure in excess of the TLV without erythral effects. However, such conditioning may not protect persons against skin cancer.

Reference:

1. *Sunlight and Man*. Fitzpatrick et al, Eds. Univ. of Tokyo Press, Tokyo, Japan (1974).

NOTICE OF INTENDED CHANGES
(for 1984-85)

These physical agents, with their corresponding values, comprise those for which either a limit has been proposed for the first time, or for which a change in the "Adopted" listing has been proposed. In both cases, the proposed limits should be considered trial limits that will remain in the listing for a period of at least one year. If after one year no evidence comes to light that questions the appropriateness of the values herein the values will be reconsidered for the "Adopted" list.

NOTICE OF INTENT TO ESTABLISH
THRESHOLD LIMIT VALUES
LASERS

It is proposed that the following footnote be added to Table 6 (Threshold Limit Value for Skin Exposure from a Laser Beam).

The IR-B and IR-C exposures to skin surface areas A(cm²) exceeding 1000 cm², the TLV is

$$(100,000/A) \cdot (mW/cm^2);$$

for areas greater than 10,000 cm², the TLV is 10 mW/cm².

LIGHT AND NEAR-INFRARED RADIATION

These Threshold Limit Values refer to visible and near-infrared radiation in the wavelength range of 400

TABLE 18
Wind Chill Cooling Rate Effects *

| Wind Chill Rates (Watts/m ² /hr) | Comments/Effects |
|--|--|
| 700 | Conditions considered comfortable when dressed for skiing. |
| 1200 | Conditions no longer pleasant for outdoor activities on overcast days. |
| 1400 | Conditions no longer pleasant for outdoor activities on sunny days. |
| 1600 | Freezing of exposed skin begins for most people depending on the degree of activity and the amount of sunshine. |
| 2300 | Conditions for outdoor travel such as walking become dangerous. Exposed areas of the face freeze in less than 1 minute for the average person. |
| 2700 | Exposed flesh will freeze within half a minute for the average person. |

*From Canadian Department of the Environment, Atmospheric Environment Service.

Work-Warming Regimen

If work is performed continuously in the cold at an equivalent chill temperature (ECT) or below -7°C (20°F) heated warming shelters (tents, cabins, rest rooms, etc.) shall be made available nearby and the workers should be encouraged to use these shelters at regular intervals, the frequency depending on the severity of the environmental exposure. The onset of heavy shivering, frostnip, the feeling of excessive fatigue, drowsiness, irritability, or euphoria, are indications for immediate return to the shelter. When entering the heated shelter the outerlayer of clothing shall be removed and the remainder of the clothing loosened to permit sweat evaporation or a change of dry work clothing provided. A change of dry work clothing shall be provided as necessary to prevent workers from returning to their work with wet clothing. Dehydration, or the loss of body fluids occurs insidiously in the cold environment and may increase the susceptibility of the worker to cold injury due to a significant change in blood flow to the extremities. Warm sweet drinks and soups should be provided at

the work site to provide caloric intake and fluid volume. The intake of coffee should be limited because of a diuretic and circulatory effect.

For work practices at or below -12°C (10°F) ECT the following shall apply:

1. The worker shall be under constant protective observation (buddy system or supervision).
2. The work rate should not be so high as to cause heavy sweating that will result in wet clothing; if heavy work must be done, rest periods must be taken in heated shelters and opportunity for changing into dry clothing shall be provided.
3. New employees shall not be required to work full-time in cold in the first days until they become accustomed to the working conditions and required protective clothing.
4. The weight and bulkiness of clothing shall be included in estimating the required work performance and weights to be lifted by the worker.
5. The work shall be arranged in such a way that sitting still or standing still for long periods is minimized. Unprotected metal chair seats shall not be used. The worker should be protected from drafts to the greatest extent possible.
6. The workers shall be instructed in safety and health procedures. The training program shall include as a minimum instruction in:
 - a. Proper rewarming procedures and appropriate first aid treatment.
 - b. Proper clothing practices.
 - c. Proper eating and drinking habits.
 - d. Recognition of impending frostbite.
 - e. Recognition signs and symptoms of impending hypothermia or excessive cooling of the body even when shivering does not occur.
 - f. Safe work practices.

Special Workplace Recommendations

Special design requirements for refrigerator rooms include the following:

1. In refrigerator rooms, the air velocity should be minimized as much as possible and should not exceed 1 meter/sec (200 fpm) at the job site. This can be achieved by properly designed air distribution systems.

8. International Organization for Standardization: *Guide for the Measurement and the Assessment of Human Exposure to Vibration Transmitted to the Hand*. Second DIS 5349. International Organization for Standardization, Geneva (in press, 1983).
9. International Organization for Standardization: *Human-Response Vibration Measuring Instrumentation*. Second Draft Proposal DP 8041. ISO/TC 108/SC 3 n 99. International Organization for Standardization, Geneva (unpublished, 1982).

PHYSICAL AGENTS UNDER STUDY

The Physical Agents Committee of ACGIH has examined the current literature and has not found sufficient information to propose a TLV. However, these agents will remain under study during the coming year to examine new evidence indicating the need and feasibility for establishing a proposed TLV. Comments and suggestions, accompanied by substantive documentation are solicited and should be forwarded to the Executive Secretary, ACGIH. Documentation summarizing the current status of the biological effects literature is available on those agents preceded by an asterisk (*).

1. **Extremely Low Frequency (ELF) Radiation*. Specifically, that portion of the spectrum from 0 to 300 Hz.
2. *Magnetic Fields*. Both pulsed and *continuous.
3. *Laser Radiation*. Specifically laser exposures of less than one (1) nanosecond.
4. *Vibration*. Whole-body.
5. *Pressure Variations*.

Bill No. Senate Bill No. 253

Date April 4, 1985

Title "An Act relating to physical agents."

Contact: Richard Arab
465-4856
Eileen Plate
465-2700

Under existing law, employers are required to provide information and training to employees on certain toxic and hazardous substances. Senate Bill No. 253 seeks to expand the "Right-to-Know" law to include physical agents.

Physical agents are defined as those listed in the "Threshold Limit Values for Chemical Substances and Physical Agents in the Work Environment" as published by the American Conference of Governmental Industrial Hygienists. The latest edition of this publication lists the following physical agents:

- Heat Stress
- Ionizing Radiation
- Lasers
- Noise
- Impulse or Impact Noise
- RF/Microwave Radiation
- Ultraviolet Radiation
- Airborne Upper Sonic and Ultrasonic Acoustic Radiation
- Cold Stress
- Hand-Arm (Segmental) Vibration

Exposure to physical agents can result in permanent disabilities, such as deafness. Often employers and employees are not aware of the harmful effects of a particular physical hazard present in the workplace, and the training and information requirements provided in this bill would assist in filling this void. This would, in turn, effect implementation of protective measures by the employer to safeguard employees, as well as provide employees with an understanding of the importance of following safe and healthful work practices.

As part of its Occupational Safety and Health program, the Department of Labor enforces regulations to protect employees from certain physical hazards (ionizing radiation, lasers, noise, RF/microwave radiation, and ultraviolet radiation). The information and training requirements of this bill would, therefore, enhance the Department's efforts to protect Alaska's workers.

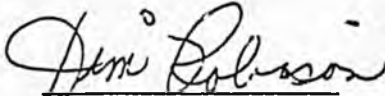
The Department would offer one additional amendment to AS 18.60 to incorporate physical agents into the definition of "be exposed" currently set out in AS 18.60.105(a)(1), as follows:

AS 18.60.105(a)(1) is amended to read:

(1) "be exposed" means to ingest, inhale, or absorb through the skin or eyes a substance, or fumes or other potentially harmful aspect of a substance or physical agent;

The Department of Labor supports Senate Bill No. 253. It will not have a fiscal impact on the Department.

APPROVED:

A handwritten signature in cursive script, appearing to read "Tim Robison".

Tim Robison
Commissioner



Official Business

Alaska State Legislature

Senate

Committee on Labor & Commerce

Pouch V
State Capitol
Juneau, Alaska 99811

SB 253: Sectional Analysis

Section 1) Expands the duties of the Department of Labor concerning occupational health and safety regulation and expands the "worker's right to know" law by including physical agents. The department would be required to publish an annual list of physical agents, maintain a current set of OSHA form 20's or equivalent information for each physical agent, and other information relevant to physical agents.

Department would also be required, upon request, to develop employee safety education programs, and obtain information on physical agents.

Section 2) Employer would be required to conduct a safety education program before an employee performs a new work task and is exposed to physical agents for which he has not already been trained. Also defines the employee safety instruction program.

Section 3) Employer is required to make available on the request of an employee, information on the physical agents to which the employee may be exposed. If the employer does not have a copy of the information requested, he shall request a copy within 3 state government working days after the request has been made.

Section 4) Concerns requirements for the posting of information on physical agents by employers.

Department shall print posters and provide information on each physical agent which the employee may be exposed to.

Section 5) Defines physical agents

Section 6) Despite the provisions in this bill, the department may continue to use existing posters until the next printing of posters.

STATE OF ALASKA 1986 LEGISLATIVE SESSION
FISCAL NOTE

Revision Date: _____

REQUEST

Bill/Resolution No.: SB 253
 Title: "An Act relating to physical agents"
 Sponsor: Josephson, et. al.
 Requestor: Senate Labor & Commerce
 Date of Request: 2/28/86

FISCAL DETAIL

Agency Affected: Labor
 BRU: Occupational Safety & Health
 Components: Occupational Safety & Health

EXPENDITURES/REVENUES : (Thousands of Dollars)

| OPERATING | FY 86 | FY 87 | FY 88 | FY 89 | FY 90 | FY 91 |
|------------------------|------------|------------|------------|------------|------------|------------|
| PERSONAL SERVICES | | | | | | |
| TRAVEL | | | | | | |
| CONTRACTUAL | | | | | | |
| SUPPLIES | | | | | | |
| EQUIPMENT | | | | | | |
| LAND & STRUCTURES | | | | | | |
| GRANTS, CLAIMS | | | | | | |
| MISCELLANEOUS | | | | | | |
| TOTAL OPERATING | -0- | -0- | -0- | -0- | -0- | -0- |

| | | | | | | |
|---------|--|--|--|--|--|--|
| CAPITAL | | | | | | |
|---------|--|--|--|--|--|--|

| | | | | | | |
|---------|--|--|--|--|--|--|
| REVENUE | | | | | | |
|---------|--|--|--|--|--|--|

FUNDING : (Thousands of Dollars)

| | | | | | | |
|---------------|------------|------------|------------|------------|------------|------------|
| GENERAL FUND* | | | | | | |
| FEDERAL FUNDS | | | | | | |
| OTHER | | | | | | |
| TOTAL | -0- | -0- | -0- | -0- | -0- | -0- |

POSITIONS :

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

ANALYSIS : Attach a separate page if necessary

Prepared by: Robert J. Bacolas, Sr.
 Division: Labor Standards & Safety

Phone: 465-4870
 Date: 3/3/86

Approved by Commissioner: Jim Robison
 Agency: Labor

Date: 3/3/86

Distribution (by Agency preparing fiscal note):

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

STATE OF ALASKA 1985 LEGISLATIVE SESSION
FISCAL NOTE

Revision Date: _____

REQUEST

Bill/Resolution No.: SB 253
 Title: "An Act relating to physical agents"
 Sponsor: Josephson, et. al.
 Requestor: Senate Labor & Commerce
 Date of Request: 3/27/85

FISCAL DETAIL

Agency Affected: Labor
 Program Category Affected: Public Protection
 BRU, Program or Subprogram(s) Affected: Occupational Safety & Health

EXPENDITURES/REVENUES: (Thousands of Dollars)

| | FY 85 | FY 86 | FY 87 | FY 88 | FY 89 | FY 90 |
|------------------------|------------|------------|------------|------------|------------|------------|
| OPERATING | | | | | | |
| 100 PERSONAL SERVICES | | | | | | |
| 200 TRAVEL | | | | | | |
| 300 CONTRACTUAL | | | | | | |
| 400 SUPPLIES | | | | | | |
| 500 EQUIPMENT | | | | | | |
| 600 LAND & STRUCTURES | | | | | | |
| 700 GRANTS, CLAIMS | | | | | | |
| 800 MISCELLANEOUS | | | | | | |
| TOTAL OPERATING | -0- | -0- | -0- | -0- | -0- | -0- |
| CAPITAL | | | | | | |
| REVENUE | | | | | | |

FUNDING: (Thousands of Dollars)

| | | | | | | |
|---------------|------------|------------|------------|------------|------------|------------|
| GENERAL FUND | | | | | | |
| FEDERAL FUNDS | | | | | | |
| OTHER | | | | | | |
| TOTAL | -0- | -0- | -0- | -0- | -0- | -0- |

POSITIONS:

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

ANALYSIS: Attach a separate page if necessary

Prepared By: Robert J. Bacolas, Sr. Phone: 465-4870
 Division: Labor Standards & Safety Date: 3/28/85

Approved by Commissioner: Jim Robison Date: 3/28/85
 Agency: Labor

Distribution (by Agency preparing fiscal note):

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- Office of Management and Budget
- Impacted Agency(ies)

7/1/84