

HB



HOUSE  
COMMITTEE REPORT

4/22

(9)

Date referred: 3/17/86

FURTHER REFERRALS: FINANCE

DATE: April 21, 1986

The RESOURCES Committee has considered SSHB 608

"An Act relating to spraying and application of pesticides and broadcast chemicals."

and recommends:

- do pass
- do not pass
- do pass with attached amendment(s)
- no recommendation
- replace with CS for SSHB 608 (Resources)  same title
- new title

and recommends do pass

further referral to the \_\_\_\_\_ Committee

- and attaches:
- letter of intent
  - first fiscal note
  - new fiscal note
  - zero fiscal note

First

SIGNING DO PASS:

Shultz [Signature]

Cato [Signature]

Miller(NP) M. W. Miller

Herrmann Adelheid Herrmann

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SIGNING OTHER RECOMMENDATION:

[Signature]

[Signature] Thompson

[Signature] Jenkins

[Signature] Sunc

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[Signature] Co-Chairman

[Signature] Shultz

Original sponsors: Davis, Hurley,  
Clocksin, et al

1 IN THE HOUSE

BY THE RESOURCES COMMITTEE

2 CS FOR SPONSOR SUBSTITUTE FOR HOUSE BILL NO. 608 (Resources)

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 FOURTEENTH LEGISLATURE - SECOND SESSION

5 A BILL

6 For an Act entitled: "An Act relating to spraying and application of  
7 pesticides and broadcast chemicals."

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

9 \* Section 1. AS 46.03.320 is amended by adding a new subsection to  
10 read:

11 (c) The department shall adopt regulations prescribing the wind  
12 and other weather conditions during which spraying or application of a  
13 pesticide or broadcast chemical for other than agricultural purposes  
14 may be conducted, in order to protect the health and safety of the  
15 public and to limit damage to crops and the environment. Regulations  
16 adopted under this subsection do not apply to the spraying or applica-  
17 tion of a chemical fire retardant by the Department of Natural Re-  
18 sources.

19 \* Sec. 2. AS 46.03.330(b) is repealed and reenacted to read:

20 (b) The department shall conduct a public hearing on the pro-  
21 posed program if a hearing is requested by the governing body of the  
22 affected municipality, or by a petition signed by at least 50 resi-  
23 dents. The requirement for public hearing may be waived if the com-  
24 missioner determines that a public emergency exists.

25 \* Sec. 3. AS 46.03 is amended by adding new sections to article 6 to  
26 read:

27 Sec. 46.03.340. NOTICE OF PESTICIDE APPLICATION. (a) At least  
28 10 days before spraying or applying a pesticide or broadcast chemical  
29 on publicly or privately owned land, the state, a municipality, a

1 utility, a public corporation, or a contractor of any of these, shall  
2 publish notice of the proposed spraying or application in a newspaper  
3 of general circulation serving the area where the affected land is  
4 located. Notice shall also be given in any other manner necessary and  
5 reasonably calculated to inform persons who lawfully reside on or use  
6 (1) land on or over which the pesticide or broadcast chemical is  
7 proposed or likely to be sprayed or applied; and (2) land any portion  
8 of the property line of which is within 100 feet of the area on or  
9 over which the pesticide or broadcast chemical is proposed to be  
10 sprayed or applied. The requirement for public notice may be waived  
11 if the commissioner determines that a public emergency exists.

12 (b) Notice under this section must include

13 (1) the chemical identity and product name of each pesti-  
14 cide or broadcast chemical to be applied;

15 (2) the dates and locations of the spraying or application;

16 (3) the problem or pest sought to be controlled by the  
17 spraying or application;

18 (4) the manner of spraying or application;

19 (5) the name, address, and telephone number of the state  
20 agency, municipality, utility, public corporation, or contractor of  
21 any of these, responsible for the spraying or application;

22 (6) appropriate warnings concerning

23 (A) the known or suspected acute and chronic health  
24 effects of exposure to each pesticide or broadcast chemical to be  
25 applied;

26 (B) evacuation of and reentry to an area affected by  
27 the spraying or application; and

28 (C) the use or consumption of, or contact with, crops  
29 or plants affected by the spraying or application.

1 (c) This section does not apply to the spraying or application  
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3 (1) a chemical fire retardant by the Department of Natural  
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5 (2) a pesticide or broadcast chemical for agricultural  
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7 versity of Alaska.

8 Sec. 46.03.350. CONTAMINATION OF DOMESTIC WATER SUPPLIES PROHI-  
9 BITED. A pesticide or broadcast chemical may not be sprayed or  
10 applied in a location or manner that contaminates water used for  
11 domestic consumption and thereby jeopardizes the health of persons  
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4/7/86✓

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29 utility, a public corporation, or a contractor of any of these, shall

1 publish notice of the proposed spraying or application in a newspaper  
2 of general circulation serving the area where the affected land is  
3 located. Notice shall also be mailed to each person who owns or  
4 resides (1) on the land, or (2) on land the property line of which is  
5 adjacent to the area, on or over which the spraying or application is  
6 proposed or likely to occur. The requirement for public notice by  
7 mailing may be waived if the commissioner determines that a public  
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29 Sec. 46.03.350. USE OF PESTICIDES NEAR WATER SUPPLIES

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PROHIBITED. A pesticide or broadcast chemical may not be sprayed or applied within 100 feet of a body of water that is a source of water for domestic consumption.

\* Sec. 4. AS 46.03.330(c) is repealed.



# ALASKA RURAL ELECTRIC COOPERATIVE ASSOCIATION, INC.

237 E. FIREWEED LANE • SUITE 301  
ANCHORAGE, ALASKA 99503 • (907) 276-3235

April 11, 1986

Representative Richard Schultz, Chairman  
House Resources Committee  
Pouch V  
Juneau, AK 99811

Dear Mr. Chairman:

At the April 2 hearing of the House Resources Committee on HB 608, relating to the spraying and application of pesticide and broadcast chemicals, member utilities of the Alaska Rural Electric Cooperative Association presented testimony opposing the legislation.

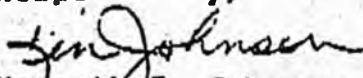
The primary concern of the electric cooperatives was the exorbitant cost associated with section three of the bill, relating to notice of pesticide application. Member cooperatives are certain their consumer/owners would incur several hundred thousand dollars in costs annually if required to provide notice as specified in the bill (CS for HB 608 dated 4/1/86).

On April 3, Marilyn Heiman, aide to Rep. Mike Davis, organized a meeting with ARECA and various special interest groups to discuss proposed amendments to the bill. Participants in the meeting reached a compromise position on the notification provision which would ensure the public is adequately notified of pesticide use while substantially reducing the cost to cooperative utilities. This compromise is reflected in the most recent version of the bill (CS for HB 608 dated 4/7/86).

Cooperative utilities recognize their responsibility to provide persons living in the affected area with reasonable notice of pesticide application and substantive information on the pesticides being used. Our members believe this can best be accomplished through use of mass media (newspaper, television, and radio), and by posting notice in local public buildings and affected areas. We support amendments to HB 608 requiring these methods of notification be used before a planned program of pesticide application is implemented.

Thank you for the opportunity to present our members concerns to the House Resources Committee.

Respectfully,

  
Kenneth S. Johnson  
Director of Information

DEMOCRACY IN ACTION



# MATANUSKA ELECTRIC ASSOCIATION, INC.

P.O. BOX 1148

PALMER, ALASKA 99645

TELEPHONE  
(907) 745-3231

April 4, 1986

The Honorable Richard Shultz  
Alaska State Legislature  
Pouch V (MS 3100)  
Juneau, Alaska 99811

Subject: NOTICE OF PESTICIDE APPLICATION

Reference: HOUSE BILL 608, SECTION 3, ARTICLE 46.0? 340

Dear Representative Shultz:

As requested by the House Resource Committee, this letter is a summary of my testimony given on April 2, 1986 during a teleconference from the State Legislative office in Wasilla. The following testimony, is against the above referenced House Bill. In order to be in compliance with the above Section, Matanuska Electric Association would have to consider one or more of the following options:

## OPTION #1

- a) Title search for one-third, or 9,000 consumers, in MEA's service area each year. (Total of 27,000 consumers over a 3-year cycle.)
- b) Field contact to identify adjacent owners of property to be treated.

Notification could not occur until items a) and b) are completed. The man-hours required to complete these items is estimated at 54,000. This is a conservative estimate, particularly when you consider the size of our service area which encompasses approximately 2,417 miles of powerlines from Eagle River to Cache Creek, located at Mile Post 121 of the Parks Highway, and to Sheep Mountain Lodge at Mile Post 113 on the Glenn Highway. In addition, most contacts take more than one trip to gather the necessary information. The written notification is also taken into account.

## OPTION #2 - Hand cut or mechanically cut, no herbicides.

- a) This option would require the Utility to hire additional employees to control the re-sprouting, which would occur on broad-leaved species such as Birch, Alder, Aspen, Cottonwood, and Willow. The total estimated additional man-hours to accomplish the re-clear are 41,396. This is based upon two to three years of growth on 2929.7 acres, which MEA controls at 28.26 man-hours per acre. This would result in the re-clear of an additional 1464.85 acres due to re-sprouting.



The Honorable Richard Shultz  
April 4, 1986  
page 2

In conclusion, we would request that the Resources Committee review this summary and our Right-Of-Way Maintenance Standards. In addition, we would request that Public Utilities be exempt from Section 3, 46.03.340 for the following reasons:

1. The existing work plan for the use of herbicides on utility easements or fee owned land is reviewed by the DEC prior to application.
2. Public notice is given in local newspapers, and other publications such as the Ruralite Magazine, a company newsletter distributed throughout our service area, and local radio stations.
3. All applications are performed by licensed applicators. The law stipulates that the supervisor must be licensed. In addition, the majority of the herbicides applied are non-restrictive, and do not require an applicator to be licensed; however, we feel that all applicators should be licensed when applying any herbicide. Further, we (MEA) have only received two complaints in the last four years on herbicide application, and both were resolved without ramification.
4. The Right-Of-Way Maintenance Standard that MEA currently uses has also been adopted by several Utilities, either in part, or in its entirety. This Standard has been closely reviewed by the DEC prior to being adopted by MEA.
5. The cost of complying with Section 3, 46.03.340 would be prohibitive to our 27,000 consumers.
6. In any case, if this Bill passes as written, we would experience these costs in our base rate.
  - \*a) The use of herbicides with prior written notice, would result in an estimated additional 54,000 man-hours, minimum.
  - \*b) Use no herbicides; hand cut and mechanical cut only, which would result in an estimated additional 41,000 man-hours, minimum.

Should you have any questions or require additional information, please feel free to contact me at (907) 745-9281.

Very truly yours,

James F. McIntosh  
Manager of Electric Operations

enc. Vegetation Management Standard (MEA)

\*9,000 consumers, 6 hours per consumer, including field identification.  
\*1,465 additional acres to be cut at 28.26 man-hours per acre.

## VEGETATION MANAGEMENT STANDARD

### MATANUSKA ELECTRIC ASSOCIATION, INC.

#### I. The Objectives of Vegetation Management are:

1. To assure constant reliability and safety of MEA distribution transmission system;
2. To create safe working conditions for line crew personnel and the safety of the public;
3. To create utility through plant management by conversion to useful low growing native species and grasses;
4. To reduce or, hopefully, eliminate fire hazards;
5. To produce a more pleasing appearance.
6. To establish a record-keeping system which indicates areas due for routine maintenance per the "cycle" system.

#### II. General

##### A. Herbicides

As long as distribution/transmission lines are located on or under land, right-of-ways will require maintenance. The conversion of land to right-of-way often alters the plant community and management of this community is a continuing problem and expense.

Herbicides have been an important tool in this program of vegetation management and they will continue to be an important tool. Herbicides are used (1) to control and inhibit hazardous vegetation on power line right-of-ways; and (2) to control all plant growth in substation yards. With selective ground application, the herbicides may be applied to individual species of plants or a small grouping of plants. The objective is to convert the plant family from the tall-growing species, which are hazardous to power lines, to low-growing species. The visual impact of such ground applications of herbicides is reduced to a minimum. Only target plants are treated, thus reducing greatly the amount of herbicides introduced into the environment. A single plant or small groupings may be treated. This type of application also permits greater diversity in the type of chemical used, method of treatment, and time of year when the herbicide can be applied. The use of herbicides for killing or regulating brush growth is not a method to be used indiscriminately, for the very property that makes it desirable also makes it undesirable. It is therefore necessary that the operators and brush control crew supervisors be trained in approved procedures, techniques, and methods before undertaking a chemical spray operation.

In order for the program to be successful, chemicals should be applied to only that specie of brush which is not wanted; extreme care should be exercised to avoid spraying near large subdivisions heavily populated areas, steep hillsides or extreme wetlands. These areas should be skipped and classified as hand-cutting only areas.

## B. Other Methods

Once the brush is under control, it will require much less effort and expense to keep it that way. The low-growing vegetation will tend to keep tall brush and tree seeds from finding their way to the ground, as well as robbing those undesirable plants that do take root of necessary sunlight, moisture, and plant food so, at best, growth will be substantially retarded. In addition, the low-growing plant community will offer food and cover to wildlife.

## USE OF DAILY BRUSH REPORT

### I. Introduction

Information on this daily brush report form is designed to satisfy three requirements; First are those imposed by federal and state laws and, second, is to provide management information. The third is to satisfy completed bid documents.

### II. Form usage

The form is divided into sections as follows: location, treatment method, mixture per acre, type of vegetation, wind, temperature, length, width, number of acres, man hours and equipment used.

1. Location. Contractor must list both beginning and ending structure. As long as no spans have been skipped, they may be listed as in the example provided under number 7 below. Skipped spans must be recorded as follows:

Str from	Str to
K29	K31
K33	K40

This indicates that on spans K31 to K33, no activity was performed. The reason for skipping a span or spans must be stated.

2. Treatment method. Contractor must state whether stump treatment, spraying of brush or application of pellets was used as the method of treatment. In cutting, state whether hand-cutting or hydro-axing was used.

3. Mixture per acre. This refers to the gallons or pounds per acre used.

4. Vegetation treated. The following codes are to be used to identify type of vegetation treated.

B = Birch  
W = Willow  
C = Cottonwood  
A = Alder  
S = Spruce

5. Wind and temperature. This may be recorded at the beginning and end of each section. This reading does not need to be recorded per span.

6. Length and width. Length and width of controlled area must be listed, as well as total acreage within one-tenth of an acre. (Example: Length x width divided by 43560 = acres.)

7. Man Hours. Man hours must be listed for time spent on specific locations. Example below.

Str from	Str to	MH
K1	K28	30

8. Vehicles. List all vehicles by license number.

9. Chemical Data.

a. List manufacturer name. (Dow, Amchem, Dupont, etc.)  
b. List mixture ratios used. (Weedone 170 - 3 gallons per 97 gallons oil) If more space is needed, use the comment section.

10. Total. Number of gallons or pounds used per report.

11. Danger Tree Locations. List nearest structure number, and identify on map with red pencil. Use comment section if more space is needed.

12. Total. This refers to total acres and manhours.

13. General Comments. List names of property owners contacted during clearing operations. In addition, note anything of interest or importance relating to the application or the right-of-way.

### III. Top of Form

Starting at the left list circuit and map number. On the right put down the time actually started on the right-of-way, and on the left the time actually finished on the right-of-way. Complete the month, day and year. The crew foreman or supervisor must sign the form. This form will be completed and given to the right-of-way clearing and maintenance officer no later than 10:00 a.m. on the morning on the business day following completion.

## RIGHT-OF-WAY MAINTENANCE STANDARD

### A. Clearance Criteria

The purpose of this standard is to provide time periods of trouble-free operation in which the minimum clearances listed below are not violated and for which a growth period must be allowed. With the exception of special situations, this growth period will be an estimate of 10 years. Of equal importance to the brush heights is brush density. Brush density will be controlled only to the extent necessary to permit reasonable use of the right-of-way for access to perform routine and anticipated emergency activities.

1. 2.4 kV to 34.5 kV - 10 feet from conductor
2. 34.5 kV to 138 kV - 15 feet from conductor

### B. Experimental Areas

Test plots developed by MEA are to be safeguarded and special instructions will be issued prior to contractor clearing.

### C. Areas Restricted by Agreement

Certain areas may be restricted by the result of negotiation with a land owner at time of acquisition. Changes do occur, particularly in land use; consequently, the restrictions may change. Restrictions currently in effect will be identified on the maps issued to contractors. Contractors will be notified of changes as they occur.

### D. Coordination and Public Awareness

A coordinated effort to inform consumers of right-of-way clearing affecting their property is essential to a successful maintenance program. Every attempt must be made to contact property owners prior to commencement of work. It should also be noted that certain easement agreements require contact with the property owner prior to clearing. This requirement will be specified on maps as necessary.

### E. Hand Application of Herbicide

MEA makes use of hand application of herbicides, as it offers the most effective method of selective vegetation control. The only species to be treated will be the target species. The pellets will be broadcast within the drip base of the tree or stump, using the label instructions to ensure the proper pounds per acre application.

## F. Cutting

### 1. Hand cutting.

Hand cutting of, undesirable species is also an effective method for selective vegetation management. Hand cutting does have the decided advantage of meeting certain aesthetic criteria. This method, which can be done in any one or combination of the parts required to fit a particular situation; namely, cutting only, cutting and disposal, cutting and stump treatment or stump treatment only, as on new lines following initial clearing. Stump treatment, if applied properly will eliminate resprouting of most species.

### 2. Tools for Cutting.

Cutting is normally done by axe and power driven tools. The terrain, density and quantity of vegetation will determine tools to be employed.

### 3. Height of Cutting.

Cut conifers below the lowest limb. This will eliminate necessity of stump treatment. Cut deciduous trees about 2" to 4" above the ground line. Application of the herbicide should be made as soon as possible after cutting. All stumps of species to be treated to prevent resprouting must be cut FLAT for application of the chemical. Cutting trees at an angle is not acceptable and will be rejected. This is a safety measure, as angular cuts leave a hazardous point.

### 4. Safety While Cutting

Exercise extreme care in cutting trees which could fall into the power line or structure. Rarely will such a tree on the right-of-way be large enough to use a wedge. In general, tie a line (poly-dacron or equal) to the tree high enough to get good leverage. Tying the line too low can pull the tree off the stump while having little effect on direction of fall. Pull the tree so that it falls away from the conductor keeping it within the limits of the right-of-way if possible. Brush generally has considerable spring in the stems; therefore, be careful of the snap of the stem and possible ricochet of the cutting tool. While working on MEA right-of-way it is highly recommended that the following safety devices be made available and used by contractors:

- a. Safety glasses
- b. Hard hats or caps
- c. Ballistic nylon chaps

## G. Disposal

### 1. Chipping

A chipper is a mechanical brush disposal unit which cuts up brush into chips and either spreads them over the right-of-way or deposits them in piles. Brush too large to be handled by the chipper is limbed and the limbs fed into the chipper; the trunks deposited on the edge of the right-of-way in neat piles.

### 2. Lopping and Scattering

This is an ideal method of disposal in many areas where chipping is not a requirement. The objective is to get the trunk of the tree flat on the ground with all branches removed by axe or saw. For safety, the limbs will be cut as close to the trunk of the tree as possible.

## H. Stump Treatment

Application of herbicides to freshly cut stumps prevents resprouting. Therefore, treat brush stumps immediately after cutting. Spray mixtures for stump treatment will be found in the herbicide chapter.

### 1. Time of Year

Stumps can be successfully treated at any time of year. If spray is not applied within 24 hours following cutting, it is best to wait until resprouting or apply pellets.

### 2. Squeeze Bottles

Squeeze bottles are becoming popular. They are easy to use and carry. They are proving to be efficient and economical. Back pack sprayers are another method that has become popular with many contractors.

## I. Screens

Screening as a recent development in right-of-way vegetation management has been the leaving of brush and trees on the right-of-way at highway crossings and other critical viewpoints. The purpose of these screening has been to reduce as much as possible the visual effect of a cleared right-of-way. Most screenings have resulted from special clearing specifications for new construction. Every effort should be made to develop vegetation screens on existing lines when the opportunity is available.

Maintenance of screens presents a continuing control problem. All activities directed to the control of the tall growing trees and brush must be performed in such a manner that evidence of maintenance activity is minimal. Most screens do not have the safety factor of 15 years of growth if they are to effectively serve as a screen; therefore, they require more periodic inspection and maintenance.

Topping in screens, when practical, can be performed on the hardwoods and conifers. Use of herbicides should be minimal, preferably limited to individual plants. Depending on the site, size, and shape of the plant, the treated plant may be left in place.

When feasible, consideration should be given to the possibility of converting the screen from fast growing problem species to slow growing species which are native to the areas.

## J. Topping and Pruning

In special instances, topping or pruning of trees may be required to attain special management goals. The need to top rather than cut trees generally occurs in areas where special aesthetic effects are desired. On newer lines, such instances were included in the clearing specifications and were part of the right-of-way when the line was energized. On the older lines such instances will be cases where a more acceptable appearance will be created and are initiated by line maintenance personnel or are created for us by the landowner. Some typical situations which require topping are:

1. Scenic area road crossing.
2. Major highway crossings.
3. Recreational areas.
4. Danger tree areas when a part of residential home site or recreational area.
5. Home site or agricultural.
6. Other

Due to the great variety of high growing brush and trees indigenous to the MEA operation area, knowledge of growth habits is quite essential. Observations of each species in its native habitat is the easiest way to make topping judgments. In general, hardwoods can be topped so that a pleasing form is retained in a healthy growing condition while enough growth is removed so that a reasonable maintenance free period is attained. Conifers present a real challenge. Topping can be a severe blow to a tree where it is weakened by the loss of too much crown. Most conifers are readily susceptible to insects and disease under such a condition. It is imperative that at least a good one-third (1/3) of the crown be left to sustain the tree.

Keep in mind that, regardless of which one of the five situations identifies the problem trees or brush, all we are really talking about are Danger Trees or Danger Brush which require special handling. In those situations which are particularly delicate and may require expertise to top prune, do not hesitate to secure the services of an expert.

#### EPA APPROVED HERBICIDES

The following herbicides are approved by the Environmental Protection Agency.

A. Non-Restrictive. These herbicides do not require applicator's license to apply.

1. Banvel 720 Brush Killer  
Active ingredients, 1 lb/gal Dicamba  
As amine salt and 2 lb/gal 2,4-D AS  
Amine salt. Liquid, water soluble  
EPA Reg. # 876-177A Ref: Velsicol Chemical Co.

2. Banvel 520 Brush Killer  
Active ingredients, 1 lb/gal Dicamba  
As acid and 2 lb/gal 2,4-D AS  
Ester. Liquid oil soluble.  
EPA Reg. # 876-168AA Ref: Velsicol Chemical Co.
3. Banvel XP Pellets Brush Killer  
Active ingredient, Dicamba, 10%  
Pellets  
EPA Reg. # 876-178AA Ref: Velsicol Chemical Co.
4. Weedone 170 (BK-170) Brush Killer  
Active Ingredients, 2 lb/gal 2,4-D  
and 2 lb/gal 2,4-DP as low volatile  
Esters, liquid, oil and water soluble  
EPA Reg. # 264-222AA Ref: Amchem Chemical Co.
5. Garlon 3A Brush Killer  
Active ingredients Triclopy  
3 lb/gal acid equivalent  
EPA Reg. # 464-546 Ref: Dow Chemical Co.
6. Roundup. Weed control in substations.  
Active ingredient Isopropylamine salt of Glyphosate  
4 lbs/gal acid equivalent  
EPA Reg. # 524-308 Ref: Monsanto Co.

B. Restrictive. These herbicides require and applicators license to apply.

1. Tordon 101 Brush Killer  
Active ingredients, .5 lb/gal  
Picloram as amine salt and  
2 lbs/gal 2,4-D as amine salt.  
Liquid mixture. Water soluble.  
EPA Reg. # 464-306 Ref: Dow Chemical Co.
2. Tordon 10K Pellets Brush Killer  
Active ingredient, 10% Picloram as  
potassium salt. Pellets.  
EPA Reg. # 464-320 Ref: Dow Chemical Co.

#### MIX RATES

HERBICIDE	MIXING FORMULA	TREATMENT
Banvel 520	Undiluted with equal parts oil	Stumps
Banvel 720	Undiluted with equal parts water	Stumps
Banvel XP	Pellets as label directs	Brush
Weedone 170	3 gal. per 97 gal. oil	Stumps

Garlon 3A	Undiluted on treated areas	Stumps
Roundup	3 qts. to 30 gal./30 gal. per acre	Weed control
Tordon 101	Equal parts Tordon 101 & water	Stumps
Garlon 3A	2 gal. Garlon, 98 gal. water	Brush control
Tordon 101	1 to 3 gal. per 97 gal. water	Brush control
Tordon 10K	40 to 60 lbs per acre	Brush control

TIME: START \_\_\_\_\_ / FINISH \_\_\_\_\_

D A I L Y B R U S H R E P O R T

CIRCUIT NO. \_\_\_\_\_

MAP NO. \_\_\_\_\_

DATE: \_\_\_\_\_  
month-day-year

SUPERVISOR: \_\_\_\_\_

SIR FROM	SIR TO	TREATMENT METHOD			HAND CUT	MECH CUT	MIXTURE PER ACRE	VEGETATION TREATED	WIND MPH	TEMP.	LENGTH	WIDTH	ACRES	MAN HOURS	LICENSE NO. OF EQUIPMENT USED
		STUMP	SPRAY	PELLET											
CHEMICAL DATA		MANUFACTURE	MIXTURE	TOTAL	DANGER TREES LISTED BY SIR NUMBER						TOTAL	TOTAL NUMBER OF VEHICLES ON JOB			

GENERAL COMMENTS



Alaska Center for the Environment  
Suite 1A  
411 West 4th Ave.  
Anchorage, Alaska 99501 274-3621

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April 2, 1986

Richard Shultz  
Alaska State Legislature  
Box V (MS 3100)  
Juneau, Alaska 99811

Re: HB 608, Pesticide notification

Dear Representative Shultz:

I am writing on behalf of the Alaska Center for the Environment in support of HB 608, an act relating to spraying and application of pesticides and broadcast chemicals.

So far, EPA has confirmed the safety of only 37 of more than 600 active ingredients used in 450,000 pesticides commercially available. Recently, EPA has ranked pesticides as their number one major issue.

Pesticides are designed to kill and they can endanger the environment and human health. People deserve to be informed about activities which could have such serious consequences.

This bill provides for advance notification which would allow people to attempt to avoid exposing themselves to pesticides, or to express their concerns to the applicator.

It would also encourage better record keeping, which could resolve doubts about exposure, should someone claim to have been injured as a result of pesticide spraying.

Keep in mind that this bill does not ban or in any way restrict pesticide use, but simply allows people to receive information about activities which greatly concern them.

We urge you to support this bill.

Sincerely,

Ursula Barril, Executive Director

cc: Adelheid Herrmann  
Mike Davis  
Scott Highleyman  
Mary Core



UNIVERSITY OF ALASKA - FAIRBANKS  
Fairbanks, Alaska 99775  
School of Agriculture and Land Resources Management  
Agricultural and Forestry Experiment Station

April 2, 1986

Alaska State Legislature  
Representative Dick Shultz  
Pouch V (MS 3100)  
Juneau, Alaska 99811

The Honorable Dick Shultz:

Dear Sir:

Sponsor substitute for House Bill No. 608 is a concern to both public and private interests in agricultural production. As the bill is now written, those persons involved in producing food and feed products and those involved in providing research and extension support to the agricultural industry in Alaska would be required to spend valuable time justifying these efforts to gain community support where in most cases this support already exists.

The concerns expressed in CSHB608 are valid concerns. However, they are concerns of which the agricultural industry in Alaska is already cognizant. Therefore I would suggest the changes made on the enclosed copy of CSHB608 be incorporated during hearings of the House Resources Committee.

Thank you for your consideration.

Sincerely,

A handwritten signature in cursive script that reads "Carol E. Lewis".

Carol E. Lewis  
Associate Professor  
of Resource Management

CEL:me

cc: James V. Drew  
Wayne C. Thomas

Introduced: 3/17/86  
Referred: Resources and Finance

BY DAVID, HURLEY, CLOCKSIN,  
KOPONEN, UEHLING, M.M. MILLER  
GOLL AND BOUCHER

IN THE HOUSE

SPONSOR SUBSTITUTE FOR HOUSE BILL NO. 608  
IN THE LEGISLATURE OF THE STATE OF ALASKA  
FOURTEENTH LEGISLATURE - SECOND SESSION

A BILL

For an Act entitled: "An Act relating to spraying and application of  
pesticides and broadcast chemicals."

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

\* Section 1. AS 46.03.320 is amended by adding a new subsection to read:

(c) The department shall adopt regulations prescribing the wind and other weather conditions during which spraying or application of a pesticide or broadcast chemical may be conducted, in order to protect the health and safety of the public and to limit damage to crops and the environment. Regulations adopted under this subsection do not apply to the spraying or application of a chemical fire retardant by the Department of Natural Resources. These regulations will also not apply to persons or corporations or public agencies involved in research pertaining to and/or endeavors leading to the production of agricultural products.

\* Section 2. AS 46.03.330 (b) is repealed and reenacted to read:

(b) The department shall conduct a public hearing on the proposed program if a hearing is requested by the governing body of the affected municipality, or by a petition signed by at least 50 residents. The requirement for public hearing may be waived if the commissioner determines that a public emergency exists.

\* Section 3. AS 46.03. is amended by adding a new section to read:

Section 46.03.340. NOTICE OF PESTICIDE APPLICATION

(a) at least 10 days before spraying or applying a pesticide or broadcast chemical on publicly or privately owned land, the state, a municipality, a utility, or a public corporation, or a contractor of any of these, shall provide written notice to each person who owns or resides on the

SSHB 608

1 land, or land adjoining the land, on or over which the spraying or  
2 application is proposed or likely to occur. Notice shall be published  
3 in a newspaper of general circulation serving the areas where the  
4 affected land is located. Notice also shall be mailed to persons who  
5 own or reside on land affected by the spraying or application. The  
6 requirement for public notice by mailing may be waived if the com-  
7 missioner determines that a public emergency exists.

8 (b) Notice under this section must include

9 (1) the chemical identity and product name of each pesti-  
10 cide or broadcast chemical to be applied;

11 (2) the dates and locations of the spraying or application;

12 (3) the problem or pest sought to be controlled by the  
13 spraying; or application;

14 (4) the manner of spraying or application;

15 (5) the name, address, and telephone number of the state  
16 agency, municipality, utility, public corporation, or contractor of  
17 any of these, responsible for the spraying or application;

18 (6) appropriate warnings concerning

19 (A) the known or suspected acute and chronic health  
20 effects of exposure to each pesticide or broadcast chemical to be  
21 applied;

22 (B) the time of and reentry to an area affected by  
23 the spraying or application; and

24 (C) the use or consumption of, or contact with, crops  
25 or plants affected by the spraying or application.

26 (c) This section does not apply to the spraying or application  
27 of a chemical fire retardant by the Department of Natural Resources.

28 \* Sec. 4. § 46.03.330(c) is repealed.

**STATE OF ALASKA 1986 LEGISLATIVE SESSION  
FISCAL NOTE**

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

**REQUEST**

Bill/Resolution No. : SSHouse Bill 608  
 Title : An Act relating to spraying and application of pesticides and broadcast chemicals  
 Sponsor : Davis/Hurley/Clocksın/Koponen/  
 Requestor : Uehling/MM Miller/Goll  
 Date of Request : 3/13/86

**FISCAL DETAIL**

Agency Affected : Environmental Conservation  
 BRU : Environmental Health  
 Components : Director's office / Pesticide Program

**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						
<b>TOTAL OPERATING</b>	0	0	0	0	0	0
<b>CAPITAL</b>	0	0	0	0	0	0
<b>REVENUE</b>	0	0	0	0	0	0

**FUNDING : (Thousands of Dollars)**



GENERAL FUND						
FEDERAL FUNDS						
OTHER						
<b>TOTAL</b>	0	0	0	0	0	0

**POSITIONS :**

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

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

No fiscal impact is anticipated by passage of HB 608

Prepared by : Doug Donegan  Phone : 465-2609  
 Division : Environmental Health Date : 3/13/86  
 Approved by Commissioner : Bill Ross  Date : 3/13/86  
 Agency : Environmental Conservation

Distribution (by Agency preparing fiscal note) :

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

# Municipality of Anchorage



P.O. BOX 196550  
ANCHORAGE, ALASKA 99519-6650  
(907) 264-4111

TONY KNOWLES,  
MAYOR

## MUNICIPAL HEALTH & HUMAN SERVICES COMMISSION

March 17, 1986

Representative Richard Shultz  
Co-Chair, House Resources Committee  
Alaska Legislature  
Pouch V (MS 3100)  
Juneau, Alaska 99811

*Rich*  
Dear Representative Shultz:

The Anchorage Municipal Health and Human Services Commission is charged with reviewing and making recommendations on "legislation which affects the health and social well-being of the residents" of Anchorage (Anchorage Municipal Code 4.60.060). In accordance with this responsibility, the commission reviewed and supports the passage of HB 608 - An Act Relating to Spraying and Application of Pesticides and Broadcast Chemicals. This legislation is consistent with the recent position the Health and Human Services Commission took on a municipal policy regarding the application of pesticides.

The Health and Human Services Commission is in the process of developing a comprehensive plan for health and human services which will establish priorities among services. The Commission's support for this legislation does not reflect any prioritization of services and needs.

Sincerely,

*James K. Barnett*  
James K. Barnett, Chair  
Health and Human Services Commission

NC25/dPDI

cc: Brad Bradley, Commission Liaison, Anchorage Assembly  
Chip Dennerlein, Intergovernmental Affairs, MOA  
John F. Franklin, Commissioner of Public Safety, MOA  
Jewel Jones, Director, Department of Health and Human Services  
Tony Knowles, Mayor  
Dave Walsh, Chair, Anchorage Assembly  
Kay Wallis, House Resources Committee, Alaska Legislature  
John Sund, House Resources Committee, Alaska Legislature  
David Thompson, House Resources Committee, Alaska Legislature  
M.W. Miller, House Resources Committee, Alaska Legislature  
Bette Cato, House Resources Committee, Alaska Legislature  
Drue Pearce, House Resources Committee, Alaska Legislature  
Roger Jenkins, House Resources Committee, Alaska Legislature

REPORT  
OF  
PESTICIDE COMMITTEE  
TO THE  
MUNICIPALITY OF ANCHORAGE  
DECEMBER 1985

ATTACHMENT E  
PESTICIDE COMMITTEE  
Minority Report

The undersigned, a minority of the Committee, appointed to advise the Department of Health and Human Services, the Mayor and the Assembly about spraying of pesticides, not agreeing with a majority vote on September 19, 1985, wish to express support for a meaningful solution to the problem as it impacts human health in residential areas of Anchorage. To this end, we support a system of prior notification as a means of allowing commercial enterprises to continue serving community needs for insect control while simultaneously allowing for individual property owners to protect families from direct and indirect pesticide contamination through application methods which release excessive amounts of pesticides into the air.

Through research conducted by members of the Pesticide Committee, differing systems of prior notification were found to be the responses of communities faced with similar dilemmas of pesticide application in residential areas. The list of states, counties and cities from across the United States who have implemented a system of prior notification and for which the Committee has information available, are as follows:

Georgetown University Law Center, Washington, D.C.

Berkley, California

Montgomery County, Maryland

Eugene, Oregon  
Santa Monica, California  
Milwaukee County, Wisconsin  
Wauconda, Illinois  
Lakewood, Ohio  
Philadelphia, Pennsylvania  
Cincinnati, Ohio  
San Diego, California  
Madison, Wisconsin  
Salinas, California  
Alameda County, California  
New Jersey  
New York  
Connecticut

The system of prior notification we are supporting was developed by members of the Anchorage Pesticide Committee. Prior notification places responsibility on those who apply pesticides. It is the intent of prior notification that individuals on adjacent property to where pesticides will be applied will receive information which allows them the opportunity of protecting gardens, children and pets. Our recommendation for prior notification is as follows:

- (1) Notice of at least 24 hours and not more than 72 hours.
  - (a) Posting of the property where commercial application will take place.

(b) Placard or other type notice to all contiguous properties -- i.e. parcels within 100 feet of actual application.

(c) Notification includes the following information:

(1) name of pesticide to be applied

(2) name and phone number of applicator

(3) statement of warning concerning garden vegetables or fruits

(4) re-entry time if available

(5) approximate time of application or the atmospheric conditions under which it is to be applied

(2) In the case of parks, Municipality would take responsibility for posting notices of intent to apply pesticide by spray (ground) application.

(3) Windspeed -- Limit applications to windspeeds of 5 knots per hour or less as measured at site of application.

Prior notification responds to needs identified by the Pesticide Committee through discussion and testimony.

(1) Individual Rights Of Property Owners -- Prior notification allows individuals the use of pesticides on their property as well as allowing adjacent property owners protection from unknown contamination of gardens, childrens' play areas, outside equipment, etc.

(2) Basic Right To Know -- Prior notification allows individuals to determine the level of hazard for their families and themselves to which a particular pesticide might pose a danger because of the known chemical sensitivity of a family member.

(3) Home Safety -- While no pesticide is completely safe, EPA has identified allowable levels of use under specific conditions. Prior notification complements, but does not exceed or replace, EPA standards in providing accurate information to property owners.

*Mark*

*Mark Callan*

*Christina Byrd*



March 30, 1986

Representative Mike Davis  
Capitol, Room 13  
Juneau, Alaska 99801

Dear Representative Davis,

The League of Women Voters of Alaska urges the passage of Sponsor Substitute for House Bill 608, An Act relating to spraying and application of pesticides and broadcast chemicals.

The League of Women Voters of the United States supports the position that democratic government depends upon the informed and active participation of its citizens at all levels of government. The League further maintains that governmental bodies must protect the citizens' right to know by giving adequate notice of proposed actions, holding open meetings and making public records accessible.

The proposed changes to AS 46.03 will enable the citizens to know ten days in advance of the application of a pesticide or broadcast chemical if the material is being applied by the state, a municipality, a utility or a public corporation or a contractor of any of these.

The League of Women Voters of the United States supports the position that action should be taken to support responsible management of our finite land resources and developed environment to ensure consideration of public interests and private rights.

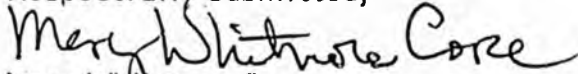
The proposed amendments to AS 46.03.320 directs the Department of Environmental Conservation to strengthen regulations prescribing the application of pesticides. The present regulations do not address weather conditions or wind speeds. It is important to protect private property rights and values in accordance with overall consideration of public health, safety and welfare.

The League of Women Voters of the United States supports policies and procedures that promote comprehensive long-range planning for conservation and development of water resources. Nationally ground water and aquifer contamination from pesticide runoff and misapplication is a critical problem. Passage of HB608 will help Alaskans avoid this serious and as yet irreversible problem.

The proposed legislation is timely direction from the Alaska State Legislature as the management of pesticides is a high priority on the Environmental Protection Agency's (EPA) 1986 agenda resulting in funds being made available to ADEC to hire one person as of July 1, 1986 to evaluate the Alaska State pesticide program and to bring the state program into compliance with the federal law. The basis of federal pesticide law is The Federal Insecticide, Fungicide, and Rodenticide Act now undergoing Congressional amendment.

Thank you for your leadership on this critical issue.

Respectfully submitted,



Mary Whitmore Core  
Chairperson, Natural Resource Portfolio

# Pesticides Finally Top the Problem List at E.P.A.

By PHILIP SHABECOFF

Special to The New York Times

WASHINGTON, March 5 — This year, nearly 25 years after Rachel Carson first warned of danger in her book "Silent Spring," the Environmental Protection Agency has put pollution by pesticides at the top of its list of most urgent problems.

A ranking of major issues distributed to key agency officials by the agency's Administrator, Lee M. Thomas, places in the No. 1 position control of pesticides already in commercial use.

Until recently, agency officials said, efforts to control air and water pollution and deal with toxic waste overshadowed the program for regulating public exposure to pesticides. Now Mr. Thomas and other officials say the agency is finally beginning to take the actions necessary to protect the public and wildlife from the effects of pesticides, the broad term the officials use for insecticides, herbicides, fungicides and other chemicals used to combat pests.

Environmentalists, scientists and other experts interviewed recently said the threat of pesticides to public health and the environment had increased with their use in the last quarter century. They said the Government had so far failed to carry out Congress's mandate of 1972 to protect people and the land, air, water and wildlife from the chemicals.

These critics acknowledged that under Mr. Thomas, under Dr. Jack A. Moore, the Assistant Administrator in charge of pesticides, and particularly under Steven Schatzow, assigned last year to head the pesticide division, the Environmental Protection Agency had begun to act aggressively to regulate pesticides.

But they also said it might be well into the next century before all the dangerous pesticides were banned, restricted or otherwise regulated.

In an interview, Mr. Thomas said increased resources would be brought to bear on pesticide regulation. President Reagan's budget for the fiscal year 1987, while cutting most other Federal programs, contains a modest \$1 million increase for the pesticide program, which would bring total spending to



United Press International

Lee M. Thomas, head of the Environmental Protection Agency.

\$22.4 million. And Mr. Thomas said other agency programs would join in the effort.

## Exposed to Pesticides: 'Virtually Everyone'

"Pesticides dwarf the other environmental risks the agency deals with," Mr. Schatzow said. "The risks from pesticides are so much greater because of the exposures involved. Toxic waste dumps may affect a few thousand people who live around them. But virtually everyone is exposed to pesticides."

A number of developments in recent years have added new urgency to the need to regulate pesticides, experts say. Among them are these:

The discovery that pesticides are appearing in underground water supplies despite an earlier belief that they would not pass through the soil. To date, 17 pesticides, including aldicarb and ethylene dibromide, either of which might cause cancer in humans, have been found in the ground water of 23 states.

The discovery that some poisons

registered for use in the 50's, 60's and 70's can cause cancer, mutations and birth defects in humans and the realization that for most of the other chemicals on the market there is insufficient and sometimes fraudulently reported information about their effects on health and the environment.

The discovery of pesticide residue in a growing number of food products.

A growing awareness that huge volumes of pesticides are used inside homes, factories and hospitals and on lawns and farms, often by people untrained in their use or unaware of their dangers.

Complaints that farm workers are still inadequately protected from pesticides and that widespread illness results. A recent study by the World Resources Institute, a research group here, estimated that more than 300,000 farm workers a year in this country were affected by pesticide poisoning.

The growing export of pesticides, some of which are banned in this country, to developing countries where they often are uncontrolled.

The pesticide industry disputes the effects on farm workers. But it acknowledges a need for improved regulation of pesticides and is working with environmentalists for significant changes in the Federal Insecticide, Rodenticide and Pesticide Act, last amended in 1972.

## 'The Pesticide Problem Is Worse Than Ever'

Senator Jesse Helms, Republican of North Carolina, said recently that he was optimistic that a new law could be enacted this year. Efforts to toughen the pesticide statute have been stalled for more than a decade, in part because of opposition from pesticide, food processing and agricultural concerns.

To date, the environmental agency has been able to provide assurances of safety for 37 of the more than 600 active ingredients used in 45,000 pesticides on the market. Even at the more aggressive pace adopted recently, it can review only 25 such ingredients a year.

"I hate to sound like a typical environmental naysayer, but the pesticide problem is worse than it ever has



Associated Press

Dr. Jack A. Moore, the E.P.A. official in charge of pesticides.

been," said Albert H. Meyerhoff, a lawyer for the Natural Resources Defense Council, an environmental group.

According to E.P.A. figures, about 1.08 billion pounds of pesticides was used in this country in 1984, nearly double the amount in 1964.

Most of the experts interviewed said there were relatively few reliable studies of pesticides' effect on humans. Evidence that they can cause cancer comes chiefly from tests on animals.

"We have done a very poor job of collecting epidemiological information on people exposed to pesticides," said Charles Benbrook, executive director of the agricultural board of the National Academy of Sciences. "But the weight of evidence is clear: Exposure to pesticides is a cause of cancer."

Dr. Ronald J. Prokopy, a professor of entomology at the University of Massachusetts, said the toll in Bhopal, India, in the 1984 leak of a pesticide ingredient "reflects only a small portion of the number of humans that are poisoned by pesticides every year." More than 2,000 people died in Bhopal and 150,000 were injured.

Thursday, March 6, 1986

Page B12

He cited estimates by the World Health Organization that 500,000 people a year were affected each year by exposure to pesticides and at least 5,000 die.

Dr. Moore of the E.P.A. said that pesticides were generally safe if used properly but added, "Certain uses and practices may be unsafe." He noted the case of ethylene dibromide, a fumigant used on grain and fruit that is suspected of causing cancer in humans. It was banned by the agency for most uses two years ago after residue was found in a wide range of food products and in underground water supplies in several areas. "I am still astounded at some of the uses of EDB and how we could be so stupid," Dr. Moore said.

## A Decade to Figure Out What It Wanted to Do

Dr. Moore said the environmental agency "took 10 or 12 years before it figured out what it wanted to do about pesticides."

"Now the pieces are coming together," he said. "I am proud of where we are going on pesticides compared to two years ago. The problem is, we are 10 years behind where we should be."

Agency officials explained that the pesticide law let the agency set standards for new products before they went on the market but did not allow removal of pesticides already being sold unless the agency could show they caused significant harm that outweighed the benefits.

Further, the agency had little relevant information on what harm the existing chemicals might cause. They had been registered for use before testing techniques were markedly improved over the last two to three decades. Hundreds of pesticides were approved on the basis of tests by Industrial Biotest Laboratories that a court later found were fraudulent.

But Mr. Benbrook of the National Academy of Sciences said the pesticides program "didn't have a spine," adding, "It had an institutional inclination to blink."

Mr. Schatzow of the environmental agency said problems multiplied in the first two years of the Reagan Administration. "A number of generalized thoughts were inappropriately applied to this program, such as, 'Let's get regulation off the back of industry and let's let the states make their own decisions,'" he said.

Mr. Schatzow said, and critics of the agency agreed, that there had since been a major turnaround. The pesticide program requires producers to submit data for determining whether chemicals should stay on the market. Companies that do not submit the information must stop selling the product.

"Special reviews" are being accelerated to determine if products pose an unreasonable risk to health, Mr. Schatzow said. He and other agency officials said the current arm's-length relationship with the regulated industry was not the case earlier in the Reagan Ad-

ministration. The regulators have also entered into negotiations aimed at reducing farmhands' exposure. And broader environmental concerns, such as pesticide effects on wildlife, are now getting attention.

Even so, the business of making sure pesticides are safe and safely used continues to move at a "glacial pace," in the words of Jay Feldman, coordinator of the National Coalition Against the Misuse of Pesticides, an alliance of grass-roots organizations.

## Chemical Whose Review 'Apparently Got Buried'

The agency's actions on the pesticide daminozide, sold under the trade name Alar by Uniroyal Inc., provide a case in point. It is chiefly used to make apples firmer and redder and to make a crop ripen uniformly. Residue has been found in a range of processed apple products, including baby foods.

In the mid-1970's the E.P.A. received several studies suggesting that daminozide could cause cancer in humans. A review began in 1977 to see if it should stay on the market. But the review "apparently got buried under a pile of papers," according to one official, and nothing more happened until 1980. In 1981 the review was abandoned and the chemical was put in a reregistration process, a much slower procedure.

Renee Potosky, spokesman for Uniroyal, said company officials had a number of "normal business meetings" with E.P.A. officials in that period to talk about Alar and other products. If the meetings resulted in a slowing of the regulatory process on Alar, she said, it was because of agreement reached at the meetings on developing new testing methods.

Last year, after Dr. Moore and Mr. Schatzow took over the pesticide program, they proposed that Alar be banned because of the cancer studies. But the E.P.A.'s science advisory panel reviewed the studies and said they were too flawed for use in issuing regulations, including a ban.

In January, the agency announced it was leaving the product on the market, with some restrictions, and ordered more studies. If no further evidence of danger is produced, it will remain on the market. If new research indicates it causes cancer, it would be removed, but the process could take as long as four more years, or 13 years after the agency was first warned of possible problems.

"Alar very succinctly points out the quandary of dealing with old versus new chemicals," Dr. Moore said. "If it were a new chemical it would have to provide information that it is acceptable before being let on the market."

Uniroyal said it had conducted many tests and found the product safe.

E.P.A. officials and other experts, including Mr. Benbrook of the National Academy of Sciences, agree that the pesticides coming into use are generally safer than the chemicals that have been on the market. "I don't think

they have registered a really bad new chemical on the market in the past five years," Mr. Benbrook said.

Dr. Jack Early, president of the National Agricultural Chemicals Association, an industry group, called pesticides an irreplaceable part of a modern technological society. "We could not grow food and fiber economically without them," he said.

But Professor Prokopy of the University of Massachusetts said, "I find it truly remarkable and ironic that we at present are experiencing apparently just as great if not a greater level of crop injury from pests as we did before the arrival of DDT." DDT came into wide use after World War II.

He cited estimates by the Department of Agriculture that 32 percent of crops were lost to insect, disease and weed pests in 1945, while in 1980 such crop loss was 37 percent.

Professor Prokopy said some pesticide use was necessary. "But my philosophy is that least is best," he said. "The less you interfere with the biological system, the better off you are in the long run."

Department of Environmental Conservation in consultation with the Department of Health and Social Services."

**Sec. 46.03.311. Public records.** (a) Permits, permit applications, records, reports, and information and documentation obtained under AS 46.03.302 — 46.03.308 are available to the public for inspection and copying. However, upon a showing satisfactory to the commissioner that a record, report, permit, application, or information would, if made public, divulge methods or processes entitled to protection as trade secrets, the commissioner shall treat the record, report, permit, application, or information as confidential.

(b) Information that is confidential may be transmitted under a continuing restriction of confidentiality to other officers, employees, or authorized representatives of the state or of the United States if

(1) the person responsible for furnishing the record, report, permit, application, or information to which such information pertains is informed at least two weeks before the transmittal; and

(2) the information has been acquired by the department under the provisions of AS 46.03.296 — 46.03.311.

(c) The provisions of this section do not limit the department's authority to release confidential information during emergency situations. (§ 10 ch 93 SLA 1981)

#### Article 6. Pesticide Control.

##### Section

320. Authority

330. Public pesticide programs

**Collateral references.** — 61A Am. Jur. 2d, Pollution Control, §§ 293-295, 299, 300, 305-406.

39A C.J.S., Health and Environment, § 47.

Constitutionality of statutes for protection of vegetation against disease or infection. 70 ALR2d 852.

Liability for injury caused by spraying or dusting of crops. 37 ALR3d 833.

**Sec. 46.03.320. Authority.** (a) The department is authorized to

(1) regulate the transportation, testing, inspection, packaging, labeling, handling and advertising of pesticides and broadcast chemicals offered for sale, or placed in commerce for use in the state;

(2) regulate and supervise the distribution, application or use of pesticides and broadcast chemicals in any state project or program, or by a public agency under the jurisdiction of the state;

(3) regulate or prohibit the use of pesticides and broadcast chemicals.

(b) The department may provide by regulation for the licensing of private applicators of restricted-use pesticides and for persons engaged

in the custom, commercial or contract spraying or application of pesticides and broadcast chemicals. A person engaged in the custom, commercial, or contract spraying or application of pesticides and broadcast chemicals may, by regulation, be required to secure a surety bond or liability insurance. (§ 3 ch 120 SLA 1971; am § 1 ch 26 SLA 1977)

**Effect of amendments.** — The 1977 amendment, in subsection (b), inserted "private applicators of restricted-use pesticides and for" in the first sentence, deleted "including the requirement of a surety bond and liability insurance for the licensee" from the end of that sentence, and added the second sentence.

**Sec. 46.03.330. Public pesticide programs.** (a) No officer, agent or employee of the state, or of a borough or city of any class, may direct, carry out or participate in the spraying or application of a pesticide or broadcast chemical in any program or project involving funds, materials or equipment of the state, borough or city, except in accordance with regulations promulgated by the department under AS 46.03.320.

(b) Before a public project that would affect lands owned separately by two or more persons is initiated, the person directing the program shall give public notice of the program in the manner required by regulations of the department. The department shall conduct a public hearing on the proposed program if a hearing is requested by the governing body of the affected borough or city, or by a petition signed by at least 50 residents. The requirement for public notice or public hearing may be waived if the commissioner determines that a public emergency exists.

(c) The provisions of this section apply to home rule municipalities. (§ 3 ch 120 SLA 1971)

**Article 7. Prohibited Acts and Penalties.**

Section	Section
710. Pollution prohibited	810. Air and land nuisances
720. Construction and operation of certain facilities prohibited	820. Emergency powers
730. Pesticides	822. Strict liability for the discharge of hazardous substances
740. Oil pollution	824. Damages
750. Ballast water discharge	826. Definitions
755. Discharge reporting	828. Other rights of action not affected
758. Civil penalties for discharges of oil	830. Proof of financial responsibility required for petrochemical facility or hazardous waste disposal site operation
760. Civil action for pollution; damages	833. Compliance with financial responsibility requirements
765. Injunctions	840. [Repealed]
770. Detention of vessel without warrant as security for damages	850. Compliance order
780. Liability for restoration	
790. Criminal penalties	
800. Water nuisances	

ashes, offal, oil, tar, dyestuffs, acids, chemicals, heat from cooling or other operations, and other substances not sewage or industrial waste which may cause or tend to cause pollution of the waters of the state;

(13) "person" means any individual, public or private corporation, political subdivision, government agency, municipality, industry, copartnership, association, firm, trust, estate, or any other entity whatsoever;

(14) "pesticide" means any chemical or biological agent intended for preventing, destroying, repelling, or mitigating plant or animal life and any substance intended for use as a plant regulator, defoliant or desiccant, including but not limited to insecticides, fungicides, rodenticides, herbicides, nematocides and biocides;

(15) "pollution" means the contamination or altering of waters, land or subsurface land of the state in a manner which creates a nuisance or makes waters, land or subsurface land unclean, or noxious, or impure, or unfit so that they are actually or potentially harmful or detrimental or injurious to public health, safety or welfare, to domestic, commercial, industrial, or recreational use, or to livestock, wild animals, bird, fish, or other aquatic life;

(16) Repealed by § 12 ch 172 SLA 1978.

(17) Repealed by § 12 ch 172 SLA 1978.

(18) "sewage" means the water-carried human or animal wastes from residences, buildings, industrial establishments, or other places, together with ground water infiltration and surface water as may be present; the admixture with sewage of industrial wastes or other wastes is "sewage";

(19) "sewer system" or "sewerage system" means pipelines or conduits, pumping stations, and force mains, and all other appurtenant constructions, devices, and appliances used for conducting sewage, industrial waste, or other wastes to a point of ultimate disposal;

(20) "standard" means the measure of purity or quality for air, water, and land in relation to their reasonable and necessary use as established by the department;

(21) "treatment works" means a plant, disposal field, lagoon, pumping station, constructed drainage ditch or surface water intercepting ditch, incinerator, area devoted to sanitary land fills, or other works installed for the purpose of treating, neutralizing, stabilizing or disposing of sewage, industrial waste, or other wastes;

(22) "waters" includes lakes, bays, sounds, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, straits, passages, canals, the Pacific Ocean, Gulf of Alaska, Bering Sea and Arctic Ocean, in the territorial limits of the state, and all other bodies of surface or underground water, natural or artificial, public or private, inland or coastal, fresh or salt, which are wholly or partially in or bordering the state or under the jurisdiction of the state.

## POISONING MAY BE:

**Acute** - occurring by ingestion (consumed or inhaled) of concentrated or diluted particles or by major contamination of skin.

**Chronic** - resulting from exposure of low concentration over a longer period of time and may be due to wearing contaminated clothing.

**DANGER:** Either acute or chronic can be misdiagnosed as flu, food poisoning, skin rash, eczema, cold, allergy or drunkenness.

Handlers and users should be prepared to:

1. Recognize signs and symptoms of poisoning for those pesticides commonly used.
2. Know where and how to get help.
3. Identify type and amount of poisoning involved; whether contacted by skin absorption, inhaled or by mouth (by eating or smoking with contaminated hands.)
4. Take proper emergency measures until help arrives or the victim can be transported to the hospital. Follow first aid and medical treatment recommendations stated on the label.
5. Locate all information about the pesticide to aid in diagnosis and antidote: the label name, chemical manufacturer and address, precautionary statement, etc.
6. Contact POISON CONTROL CENTER for information:

Fairbanks Memorial Hospital 456-7182  
Anchorage Providence Hospital 563-3393  
Seattle Poison Control Center 206-634-5252

All are listed under POISON CONTROL CENTER

Pesticide poisoning affects the body in a variety of ways, depending on its chemical composition. Some are easily absorbed through the skin, hair, eyes or under fingernails.

Fumes, vapors and dust laden with particles cause damage to lungs and other organs. The bloodstream becomes affected. Licking lips or handling cigarettes while handling or spraying pesticides will draw poison into the body. The body will cope with small amounts. Build-up of some chemicals are irreversible and can cause permanent disability or death.

## EXAMPLES OF PESTICIDE COMPOUNDS AND POISONING SYMPTOMS

### ORGANOPHOSPHATES

EXAMPLES: Co-Ral, Diazinon, Parathion, Malathion, etc.

#### SYMPTOMS:

##### MILD:

Dizziness  
Tearing - shrinking pupil  
Vomiting and diarrhea  
Excessive sweating and salivation  
Drop in heart beat to 50 per minute  
Rippling of surface muscles below the skin  
Loss of appetite  
Nausea and cramps

##### MODERATE:

The above symptoms advance to:  
Pinpoint pupils  
Muscle twitching  
Bronchial discomfort  
Inability to walk due to incoordination or weakness

##### SEVERE:

Unconsciousness - near death  
Local or generalized seizures  
Pupils widely dilated  
Profuse secretion from eyes, nose, mouth, lungs and skin

### DIPYRIDYL COMPOUNDS

EXAMPLES: Paraquat, Diquat

#### SYMPTOMS:

If ingested, immediate pain in mouth, throat, chest and abdominal area with vomiting, diarrhea and muscle aching.

#### ALSO:

Irregular growth of fingernails  
Fingernails turn black  
Throat and nose irritation  
Nosebleeds  
Injury to lung tissue

*Note: Symptoms may seem moderate but within days kidney and liver damage will result in jaundice and urinary disorders. Within 3 to 14 days coughing, rapid breathing and heavy fluid build-up in lungs occurs. Possible rapid growth of fibrous connective tissue on lung surface may develop which cannot be reversed or stopped. A small amount will trigger deterioration which continues after poison is gone.*

### ORGANOCHLORINE COMPOUNDS

EXAMPLES: Toxophene, Chlordane, Heptachlor, etc.

#### SYMPTOMS:

Attacks the nervous system as a powerful stimulant or convulsant. Nausea and vomiting is first symptom, followed by apprehension, hyperactivity and mental confusion, dizziness, muscle twitching.  
Later: severe convulsions, affecting large muscle group similar to epileptic seizures.

*Note: Neither sweating nor excessive secretions occur. No specific treatment except to empty stomach, if ingested. Follow specific first aid instructions on the pesticide label. CALL POISON CONTROL before inducing vomiting. When skin has been exposed, remove contaminated clothing and wash victim thoroughly with detergent and water.*

#### STRYCHNINE:

Vertebrate poison. An alkaloid extracted from the seeds of *Strychnos nux Vomica*

#### SYMPTOMS:

Acts on the central nervous system within 10 - 30 minutes, resulting in violent convulsions. Death results from intense muscle spasms that stop breathing during convulsions. Stimulation of victim intensifies reaction. Isolate victim from confusion, noise, light. Keep victim warm.  
Physician should administer anticonvulsants.

### ZINC PHOSPHIDE:

EXAMPLES: Phosrin, Zinc-Tox, Gopha-Rid

#### SYMPTOMS:

Diarrhea and stomach pain  
Nausea and vomiting  
Tightness in chest  
Excitement and feeling of coldness  
Can produce unconsciousness, coma & death  
Stimulates the nervous system to bring on convulsions. Is easily absorbed through skin and breathing fumes. Poisons accumulate in the body and are slow acting.

**TREATMENT INCLUDES:** Inducing vomiting by mechanical stimulation or Syrup of Ipecac. Follow with a 3 - 5% solution of water and sodium bicarbonate to neutralize the acid and settle the stomach. Two table-spoons baking soda per pint of water equals a 6% solution. Reduce to one tablespoon per pint for a 3% solution.

**IMMEDIATE TREATMENT IS CRITICAL!**

**DO NOT USE ANY HOME REMEDY**

## DO NOT TAKE CHANCES

Time is the key to recovery and survival.

1. Locate pesticide labels or learn the kind of chemicals involved and how they were used. Note if contamination is via skin or ingestion.
2. Check label and follow recommended emergency measures.
3. Contact: Poison Control Center for advice.
4. If advised, transport to doctor and take labels with you!
5. Remove chemical soaked clothing. Wash victim's skin with large amounts of detergent and water, as recommended in publications listed below.
6. Remember to prevent self-contamination!

**IMPORTANT** - The LABEL is of utmost importance! It provides information about:

Proper content  
Proper handling and storage  
Protective clothing  
Proper safety techniques for application  
Necessary emergency measures.

The label also states that: "It is a violation of Federal Law to use the product in a manner inconsistent with its labeling." If one does not adhere to the label directions, the federal law will have been violated.

## FOLLOW ALL LABEL DIRECTIONS

## USE PESTICIDES SAFELY

### PUBLICATIONS AVAILABLE:

**Protect your Family** - Tips for Laundering Pesticide Contaminated Clothing - HE 382

**Protective Clothing for Handling Pesticides** - HE 383

**Applying Pesticides Correctly** - A guide for Private and Commercial Applicators, published by U.S.D.A. and U.S.E.P.A.

Order from: Extension Horticulturist  
Cooperative Extension Service  
Building H  
Anchorage Community College  
Anchorage, Alaska 99508-4670

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The misuse or careless use of rodenticides, insecticides, herbicides, fungicides or other pesticides pose a serious threat to the user. They can be extremely toxic.

# SIGNS AND SYMPTOMS OF PESTICIDE POISONING

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COOPERATIVE  
EXTENSION  
SERVICE

UNIVERSITY OF ALASKA,  
USDA AND SEA GRANT COOPERATING

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**LABELS** are of prime importance to understanding proper use, storage and first aid treatment.

### SAVE THE LABEL

Keep it accessible and readable in case of an emergency.

*Read the label BEFORE using any pesticide.*

It may be a matter of life or death!

Follow all precautionary statements.