

INTEGRATED PEST MANAGEMENT PLAN

Acadia National Park
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INTRODUCTION

INTEGRATED PEST MANAGEMENT

The purpose of integrated pest management (IPM) is to manage pest species at an acceptable level in terms of resource protection, economic, ecologic, and social levels of injury. A balanced approach of natural, biological, and chemical suppression coupled with physical barriers and changing human use patterns, can manage pest populations at acceptable levels while maintaining environmental and preservation integrity.

An effective IPM program requires a variety of important information:

1. A determination that the organism is indeed a "pest", i.e. that it is damaging a resource or threatening human health.
2. Proper identification of a pest organism.
3. A knowledge of both pest and beneficial organisms and their biology.
4. Adequate monitoring programs which detail changes in predator/prey populations.
5. Ability to ascertain expected and actual injury levels.
6. Knowledge of preventative strategies, alternatives and techniques.
7. Economic and aesthetic action thresholds to initiate pest management.
8. Selective management tactics.
9. Evaluation of management procedures used.
10. Continued monitoring of pest population and damage levels.
11. Well kept records documenting the problem and prevention or management actions.

The implementation of an IPM approach to pest management has been a servicewide goal of the National Park Service (NPS) since 1979. This plan has been developed to establish an effective IPM program at Acadia National Park. Specifically, it will describe the basic principles and guidelines of IPM, and will apply them directly to individual pest problems in the Park. Because of the scope of the program, beaver management is addressed separately in the Beaver Management Plan (Bernatowicz and O'Connell, 1990). As new pest problems arise, action plans addressing each problem will be developed and included.

HISTORY OF PEST MANAGEMENT AT ACADIA NATIONAL PARK

Pest organisms, often introduced without their complex of natural parasites and predators, have impacted native ecosystems in North America since European settlement began. In Acadia, the gypsy moth (Lymantria dispar), spruce budworm (Choristoneura fumiferana), white pine blister rust (Cronartium ribicola), and other pests were detected in the 1920's. In the 1930's, a Ribes (species of currants) and Grossularia (gooseberries) management program was instituted to eliminate the secondary hosts of white pine blister rust on Mt. Desert Island. This program continued into the early 1970's, involving thousand of hours of effort to mechanically remove Ribes. Other insects of concern since the late 1930's include beech scale (Nectria spp.), Bronze birch borer (Agilus anxius), and the mountain ash sawfly (Pristiphora geniculata). By 1941, over one million parasites (species unknown) of the European spruce sawfly (Gilpinia hercyniae) had been released by Park officials to protect native forests.

In 1933, men from the Eagle Lake Civilian Conservation Corps camp initiated a ragweed (Ambrosia artemisiifolia) eradication program along the main roads of Mt. Desert Island. Approximately 90 man days were spent pulling and burning ragweed along 30 miles of roadway. Despite their efforts, ragweed is well established in the Park today.

Beaver populations were also mechanically managed when their actions conflicted with man's developments. Because actions were not based on scientific information, at times these efforts were unnecessary and irresponsible. Most notably, dams and lodges were destroyed with backhoes or dynamite to regulate water levels, and animals were moved into unsuitable habitat or killed. These actions were repeated when the same problems arose again.

Until the 1960's, the impact of pesticides on the environment was often overlooked. Chemical pesticides were considered a panacea for many pest problems. Prior to 1965, Acadia's records reveal the use of various chemical pesticides including DDT, malathion, lead arsenate, and lime sulphur. Many pounds of lead arsenate (1930's to 1950's) were used to suppress mountain ash sawflies and other forest pest insects. Lime sulphur was used in an attempt to manage beech scale (beech bark disease) in the 1940's. The last and most intense DDT spray program was in 1962 when 8,700 acres were sprayed on Mount Desert Island (6,500 acres in Acadia) to suppress gypsy moths and other insect pests. The 1960's represented the end of major pesticide use in the Park. No documentation exists for other types of pest management such as for structural pests and weeds before 1981.

The U.S. Forest Service, under cooperative agreement, has been inspecting the Park for outbreaks of forest insect pests on an annual basis since at least 1977 (no records found prior to

1977). No major infestations have been documented after 1977, except in 1981 when approximately 500 acres showed moderate to heavy defoliation by gypsy moths. The population of gypsy moth crashed the next year and has been very low since. Park staff and the U.S. Forest Service continue to monitor populations of selected pests annually.

In 1979 the NPS officially adopted the goal of using an integrated pest management approach when addressing pest problems in an effort to reduce pesticide use while maximizing pest management efforts. In support of this goal, Acadia designated a member of the resource management staff as IPM Coordinator in 1984. For the first time accurate records were kept regarding pest monitoring and pesticide use, and an integrated approach to pest management was used.

PRINCIPLES OF INTEGRATED PEST MANAGEMENT

Integrated Pest Management (IPM) is composed of the following components:

IDENTIFICATION

A pest is an organism which interferes with management objectives. It threatens or causes to natural or cultural resources or to human health. It is important to correctly identify the pest organism to genus and species in order to design and implement a successful management program.

MONITORING

Systematic, quantifiable, and uniform monitoring is the key to a successful IPM program, for it is the basis of decisions regarding pest management. Through monitoring one determines pest population and damage levels. A careful and thorough assessment of the problem and the situation can be made. Baseline population levels can be established.

SETTING INJURY LEVELS

The injury level is the injury, as related to population size, beyond which an unacceptable level of damage is reached. It may be based on economic, aesthetic, or ecological factors as they relate to resource damage. The amount of damage and/or population size that comprises an injury level should be evaluated independently for each combination of site, time, and species. Once an injury level has been reached, the optimal time for treatment is past. Therefore, treatment must be implemented at some predetermined point called the "action level". This is the level of pest population size at which action must be taken to prevent reaching resource injury. Injury levels are based upon quantitative monitoring.

TREATMENT STRATEGIES

Once an action level has been reached, some type of treatment is necessary to avoid damage beyond an acceptable level. A management strategy which combines many different types of suppression techniques is more effective over the long run than a single method. Strategies may be direct or indirect. Indirect suppression includes design considerations or modifications, habitat modification or behavioral changes. Direct methods include physical, biological, or chemical controls. While chemical suppression may be a necessary and important component of a management strategy, it should be used as a last resort and only in combination with other strategies. When chemical suppression is necessary, the pesticide should be carefully chosen. Consideration should be given to its toxicity,

effectiveness, selectivity, operator safety, environmental persistence, and pest resistance. The timing of treatments is very important and should be based on a thorough monitoring program, knowledge of pest biology, weather influences, and host responses.

EVALUATION OF CONTROL

After a management strategy is chosen and implemented, the IPM program should be evaluated. Judgement concerning effectiveness should be objective and should consider cost, direct effect on pest population, indirect or side effects, timing, ease of implementation, monitoring techniques, and other pertinent factors.

DOCUMENTATION

In order to achieve long term continuity and overall program effectiveness, an organized, standardized record-keeping system is an essential part of an IPM program. Pest emergence dates, and easy to follow monitoring techniques should all be documented in detail. Records form the basis of decisions and serve to pass information along over time regardless of personnel changes.

GUIDELINES FOR PESTICIDE USE & PURCHASE

NATIONAL PARK SERVICE POLICY

The Management Policies of the National Park Service (1988) clearly address pesticide use:

"The choice to use a chemical pesticide will be based on a review by regional and Washington office coordinators of all other available options and a determination that these options are either not acceptable or not feasible; cost or staffing considerations alone will not be adequate justification for use of chemical control agents. Chemical pesticides that are not specifically exempt from reporting (regardless of who the applicator is) will be used only with prior approval by the Director on an annual basis. The application of such pesticides is subject to the Federal Insecticide, Fungicide, and Rodenticide Act (7 USC 136 et seq.), Department of the Interior policies and procedures (DM 517), the NPS Draft Pesticide Use Guideline, Environmental Protection Agency regulations in 40 CFR, and Occupational Safety and Health Administration regulations."

The Director has delegated his authority to approve pesticide use proposals to the Associate Director, Natural Resources, who is provided technical support by the Servicewide IPM Coordinator in the Science Support Staff. Whenever a pesticide is determined to be a necessary part of the management strategy, the Park IPM Coordinator will complete a Pesticide Use Proposal Form (10-21A), sign it and submit it to the North Atlantic Regional Office IPM Coordinator, preferably on COMMON and with a follow up paper copy. Upon concurrence of the use of the pesticide, it will then be forwarded to the Washington Office IPM Coordinator for approval. Only after WASO has approved the pesticides use will application at the Park level commence. Because this process takes time, it is wise to anticipate any pesticide use at the beginning of the year and obtain approval in advance of need. If a problem arises which requires immediate action, the Park may obtain approval from the NARO IPM Coordinator by telephone. However, a follow-up 10-21A is required. In all cases, written documentation is necessary.

All pesticide use shall be in accordance with the guidelines presented in the "Guide to Pesticide Use in the National Park System (September, 1985). All employees who apply pesticides in parks will be required to be certified. Certification may be acquired by successfully completing a 104 hour course which is given jointly by the NPS and the Department of Defense (DOD) and a 40 hour IPM course. The DOD course is accepted by the State of Maine to become state certified at the applicator level. At this time the State does not accept this training to be State

certified at the master level. The North Atlantic Region IPM Coordinator strongly urges all Acadia pesticide applicators to obtain their Maine license. For a more complete discussion of State regulations see Appendix II.

Immediately following each treatment, the applicator will document the treatment on the Pesticide Use Log. At the end of each calendar year the Park IPM Coordinator will submit a summary of the year's pesticide use to the regional coordinator and to the Maine Pesticide Control Board.

MAINE PESTICIDE REGULATIONS

The State of Maine has strict regulations regarding pesticide application on public lands.

Certification Requirements

For each government facility there must be an employee certified at the master applicator level to supervise and coordinate all pesticide application programs, apply for necessary application permits, and submit yearly pesticide use reports. "This master applicator must have day to day contact with persons applying pesticides within such employing entity and have the ability to be on site to assist such persons within a reasonable period of time (1-2 hours)" (Maine Pesticide Regulations, May 8, 1988). Master level certification requires written and oral examinations on the core study materials as well as in any category which pertains to any pesticide application in the park.

Additionally, the application of any pesticide must be directly supervised by an employee who has been state certified at the commercial applicator level in the category that pertains to the application. Direct supervision has been defined to mean that the certified person must be on site when the pesticide is applied. For instance, if a three person crew is in the field performing exotic plant control, at least one person applying the herbicide must be certified.

Special Provisions

Special provisions apply to the application of pesticides in certain situations. The specific regulations should be consulted in the following cases:

1. **Registered Pesticides.** Pesticides not registered by the Maine Department of Agriculture may be applied only in specific instances. Furthermore, all registered pesticides may be applied only for registered uses, and must be applied at registered dosages.

2. Right-of-Way Applications. Herbicides may be applied to deciduous and evergreen growth in specific height classes along right of ways only the year following cutting. Chemical pruning of single limbs of trees over the prescribed heights may be performed.

3. Pesticide Storage and Disposal. Prior to disposal, unused pesticides, whether in sealed or open containers, must be kept in a secure enclosure and otherwise maintained so as to prevent unauthorized use, mishandling, or loss; and so as to prevent contamination of the environment and risk to public health. Additional regulations apply to the storage and disposal of obsolete, unused, physically altered, or expired pesticides and rinsates.

4. Aquatic applications. Any pesticide applied to control aquatic pests in a river, stream, brook, creek or other waterway; any pond, marsh, lake or body of water that drains into such waterway; any body of water used for public or private water supply; any great pond; any coastal wetland or any tidal water must first obtain approval from the Board of Pesticide Control.

5. Employer/Employee Requirements. Persons certified for pesticide applications are required to acquaint those working under their direction with the hazards involved in the handling of the pesticides and proper handling procedures to avoid those hazards. Necessary safety equipment as set forth on the label must be provided.

ACADIA NATIONAL PARK GUIDELINES FOR PESTICIDE PURCHASE

As stated earlier, all pesticide use must be authorized by the Regional and Washington IPM coordinators (or their appointees). In order to prevent Park employees from circumventing this requirement, all purchase of pesticides at the Park level will first be approved by the Park's IPM coordinator after authorization from NARO and WASO. DI-1s for any product with an EPA pesticide registration number will be signed by the IPM coordinator before the item is purchased.

FORM 10-21A
(REV. 11/83)

UNITED STATES DEPARTMENT OF INTERIOR
NATIONAL PARK SERVICE
PEST CONTROL PROGRAM REPORT

TARGET PEST:

REGION:

SIGNATURES OF APPROVAL

YEAR:

PARK: _____ DATE: _____

ORGANIZATION:

PROJECT:
(e.g., YELL-84-01)

REGION: _____ DATE: _____

PURPOSE:

EPA REG. #:

SEASON OR PERIOD
OF APPLICATION:

ACTIVE INGREDIENT:

AREAS TO BE AVOIDED:

% or #/G (/)

ACTIVE INGREDIENT:

AREAS TO BE TREATED
WITH CAUTION:

MIX OF PRODUCT
WITH DILUENT:

PRECAUTIONS:

PRODUCT USAGE RATE:

USE OF TRAINED OR
CERTIFIED PERSONNEL:

PRODUCT AMOUNT USED
PER APPLICATION:

MONITORING:

METHOD OF TREATMENT:

PERSON TO CONTACT:

FORM APPLIED:

OTHER REMARKS:

AREA OR UNITS TO
BE TREATED:

NUMBER OF SITES:

DESCRIPTION OF SITES:

NO. OF APPLICATIONS :

AMT PRODUCT USED TOT:

PARK :
REGION :
YEAR :

[illegible]

Applicator Company_____

Address _____

Period Covered _____

County _____ Tel.# _____

[illegible]

GENERAL BIBLIOGRAPHY

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- U.S. Dept. of Agric., Forest Service. 1979. A guide to common insects and diseases of forest trees in the Northeastern United States. Northeast. Area State Priv. For. Insect and Disease Management., Broomall, PA. NA-FR-4. 123 pp.

APPENDIX I

ACTION PLAN CARPENTER ANTS

SPECIES: Carpenter Ant (Camponotus pennsylvanicus)

IDENTIFICATION:

Ants are in the order Hymenoptera, and are thin waisted, have 3 distinct body parts, and have elbowed rather than straight antennae. Carpenter ants may be distinguished from other ants by their large size - 3/8 to 1/2 inches. They have shiny black bodies which sometimes may appear reddish-brown. The abdominal pedicel is composed of 1 segment, where most other ants have 2. The cloacal opening is surrounded by a fringe of hairs.

DESCRIPTION OF THE PEST AND POTENTIAL FOR DAMAGE:

Life cycle: Colonies are initiated by a single queen who begins a nest by replacing an old queen or building a new nest in a tree cavity, structure, soil, or under a rock. The queen seals herself into a chamber and produces a small number of eggs. When these eggs hatch the queen feeds them from her salivary gland secretions until they develop and can take over the work of the nest. Workers care for the queen and the new eggs. They feed on nectar, sap, honeydew, live and dead insects, and are attracted to sweet liquids and crumbs. To create nests, workers chew intricate parallel concentric galleries running through wood. Windows cut to the outside allow food to be brought into the nest. Colonies three years or older produce winged male and female workers which leave the nest to produce new colonies. A mature colony may contain up to 5000 workers. Carpenter ants forage from April to June and from September to October.

Damage: Damage to wooden structures occurs when lumber is hollowed out during nest building. Wood which is damp or has been invaded by wood rot fungi is especially susceptible, but any wood in a building may be affected. Nesting sites resemble ornate carvings due to the many small galleries produced. Often small piles of sawdust are found near the nest, and chewing sounds may be heard. Indirect damage occurs when ants feed on paper or fabric goods or on food-soiled items. Large numbers of ants may cause aesthetic problems, especially in areas of heavy visitor use. Workers may bite if irritated, though carpenter ants do not sting.

PROBLEM AREAS WITHIN THE PARK:

Any structure containing wooden timbers may be subject to infestation by carpenter ants. Buildings with a history of ant infestation include the Islesford Historic Museum, Echo

Lake residence, Visitor Center, Ranger Office, Carroll Farm House, Thompson Island Information Center, Isle au Haut Ranger Office, and others.

MONITORING AND ACTION LEVELS:

Optimally, annual inspections of structures and surrounding areas for evidence of infestation should be made in the spring when ants are becoming active. However, due to staffing shortages this has not been practical. Most buildings may be monitored by building users if given minimal training. Seasonal and permanent employees residing in park housing have proven to be especially good monitors. Building users should be instructed during seasonal training to look for wandering ants, partial bodies of ants, sawdust which often contains frass, nesting sites, and potential food sources. A follow up memo to all park employees serves as a good reminder and provides identification information. Upon detection of the presence of ants, the Park's IPM Coordinator will be contacted, and a closer investigation will be made to locate a nesting site if it exists. Inspection zones may extend up to 300 feet from the structure being monitored. In areas of heavy infestation ant trails may be identified. Buildings with a history of ant infestations, or those that are not used regularly such as the Carroll Farm House, must be monitored more closely.

TREATMENT ALTERNATIVES:

Natural enemies: Three types of fungi parasitize carpenter ants: Cordyceps unilateralis, Desmidiospora myrmecophila, and Beauveria globuifera. Apocephalus pergaudei, a phorid fly, also parasitized these ants. Pileated woodpeckers feed on carpenter ants. However none of these agents provide useful levels of control.

Non-chemical treatments:

- Trim plants so that no branches touch the structure.
- Make sure that any moisture problems such as leaking roofs, plumbing, downspouts, etc. are eliminated.
- Ensure attic and basement ventilation is adequate to reduce moisture accumulation.
- Store firewood off the ground and away from structures whenever possible.
- Eliminate soil/wood contact points, and replace rotted or damaged wood with pressure treated wood where appropriate.
- Keep area free of food debris using good sanitation procedures to reduce the presence of foraging ants.

Chemical Treatment:

A mixture of pyrethrins and silica aerogel (TriDie® or Drione®) may be used to treat nests in structures after receiving approval for use through the regional office and the IPM coordinator in Washington. The treatment is applied by injecting holes which have been drilled into infested wood near the nest. Other chemical treatments include Drax®, which consists of boric acid mixed with mint apple jelly and is used as a bait, and a boric acid dust known as Certox®.

PREFERRED TREATMENT:

The presence of any ants within a structure will be cause for closer inspection and institution of preventative or corrective actions. Food sources will be identified and removed where possible. Sources of moisture will be located and solved through repairs and alteration. Fire wood stored in buildings will be closely inspected, and relocated outside. The detection of any active nests will trigger chemical suppression methods.

SOURCES:

Drione® is manufactured by the Fairfield American Corporation, 238 Wilson Avenue, Newark, New Jersey 07105. It is currently unavailable from any sources in Maine, but is available from the Bain Pest Control Company whose main office is located on 1320 Middlesex Street, Lowell, Massachusetts 01851. Phone = (617) 452-9621. 1987 cost was \$15.90 per pound.

Tri-Die® is manufactured by Whitmire Research Laboratories, Inc. of St. Louis, Missouri 63122.

Drax® is available from R-Valve, Inc. Phone 818-798-4000.

Certox® is available from the York Chemical Company. Telephone 800-645-6000.

RECORD KEEPING:

Written documentation of inspections, treatments, and results will be maintained. Building Monitoring Forms will be used whenever unoccupied or historically infested buildings are inspected.

REFERENCES:

National Park Service. 1984. Integrated Pest Management Information Manual. Washington, D.C. NPS, Biological Resources Division.

® Indicates a registered name

CARPENTER ANT MONITORING FORM

Structure _____ Location _____
Inspector _____ Date _____

Nearby sources of infestation (trees, woodpiles, etc)?

Woody plants touching building?

Buried wood waste present?

Are wood supports in contact with ground or imbedded in slab?

Poor housekeeping habits or other food sources?

Dry rustling sounds? Sawdust/Ant bodies/Frass?

Live ants present?

Plumbing leaks or water problems?

Infestation found? YES _____ NO _____

Location, intensity of infestation - Describe fully, use back if necessary:

Treatment/Repair recommendations:

Treatment date: _____ Repair date: _____

Name: _____

Remarks:

ACTION PLAN
YELLOWJACKETS, BEES, & WASPS

SCIENTIFIC NAME	COMMON NAME
A. <u>Apis mellifera</u>	Honeybee
B. <u>Vespula maculifron</u> , <u>V. vulgaris</u>	Yellowjacket
C. <u>Polistes</u> spp.	Paper wasps
D. <u>Vespula maculata</u>	Bald-faced hornet

DESCRIPTION OF PEST AND POTENTIAL FOR DAMAGE:

Refer to Pictorial Keys to Arthropods, Reptiles, Birds and Mammals of Public Health Significance (USDHEW, PHS, 1967) for keys to the various species.

All of these hymenopterans represent hazards to Park visitors and employees due to their potential for inflicting stings. Approximately one out of every 200 people are hypersensitive to bee or wasp venom (Acre, 1980). When these individuals are stung, death can result in as little as 15 minutes if epinephrine is not administered subcutaneously. To compound the problem, many people don't know they are sensitive until they are stung for the first time. Additionally, these species cause distraction and are a nuisance to park visitors because of the fear of being stung.

PROBLEM AREAS IN THE PARK:

Nests may be found anywhere in the Park, although most conflicts with visitors occur in the heavily used visitor service areas. The Visitor Center, Jordan Pond House, the restrooms at the Nature Center, the Wild Gardens, Echo and Sand Beaches are the areas with the most complaints. Most problems are associated with nests, although yellowjackets may be attracted to trash cans, water fountains, or food.

MONITORING AND ACTION LEVELS:

Monitoring is visual and qualitative at first, but should be recorded and documented. Employees or visitors may report wasp/bee activity, or someone may be stung. In many cases, nests will be seen before any stings are reported. If the problem consists of yellowjackets foraging at a point source, quantitative monitoring may be possible. Traps or baits may be useful to initiate monitoring. Fifteen foraging yellowjackets visiting a garbage can in a 10 minute interval is indicative of a severe problem (NPS, 1984). Action levels will take into consideration location, time of season, and nature of the problem. Inside visitor contact stations the presence of individual insects will require suppression action. Nests located in areas of high visitor use will be removed. (For example, along sidewalks near buildings, at beaches, within ten feet of visitor contact station parking lots.)

TREATMENT ALTERNATIVES:

The solution to the problem lies in separating human and bee/wasp populations.

1. HABITAT MODIFICATION

A. Reduce insect access to food sources by placing lids on garbage cans, and by picking up trash frequently. Large dumpsters near the Jordan Pond House should have tightly fitting lids to prevent access by yellowjackets.

B. Reduce human contact with swarms or nests by roping off nests until removal is accomplished.

2. PHYSICAL

A. Remove nest, preferably at night when insects are less active and as many individuals can be captured as possible. If nests are small, a small propane torch is effective. If honeybees are the problem, a local beekeeper may be able to remove the swarm.

3. CHEMICAL

A. Spray individuals and/or nests with an approved, fast-acting insecticide.

4. PUBLIC EDUCATION

Interpretive staff should inform the public of the ecological importance of these insects, and explain that human behavioral changes are necessary to reduce adverse interactions.

PREFERRED TREATMENT:

When action is necessary, the following steps will be taken:

1. When a nest is located it should be reported to the IPM coordinator, preferably in writing. Note date, time, location, and nature of problem.
2. IPM coordinator will determine the best treatment strategy and will perform the treatment or will authorize treatment by another individual. If chemical treatment is the preferred alternative, treatment will be performed only by a certified pesticide applicator.
3. Treatment will be documented and monitored by the IPM coordinator. The Pesticide Use Form will be used if chemical treatment is the chosen alternative.

SOURCES:

Contact the regional IPM coordinator for a list of approved wasp and hornet jet sprays, and sources. Many locally available products are not approved because they contain CFC propellants or hazardous active ingredients. Bees and wasps are problems every year. The IPM coordinator should order an approved pesticide in early spring so that it will be available when the need arises.

REFERENCES:

Akre, R.D., A. Greene, J.F. MacDonald, P.J. Landholt and H.G. Davis. 1980. Yellowjackets of North America. U.S. Dept. Ag. Handbook #552. 102 pp.

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ACTION PLAN
BITING FLIES - IMPACT ON HUMANS

<u>SPECIES:</u>	COMMON NAME	SCIENTIFIC NAME
	Black Flies	<u>Simulium</u> spp.
	Mosquitos	family <u>Culicidae</u>
	Deer Flies	<u>Chrysops</u> spp.
	Horse Flies	<u>Tabanus</u> spp.

IDENTIFICATION:

Black flies are small, black, two-winged flies which are commonly found near running water because they breed in clear, clean, fast running streams. They are approximately 3/8" long with short, rounded bodies and short antenna. The larval stage is aquatic. Black flies are an important part of the food chain. They are distributed throughout the northern sections of North America. Their bite may be painful, and is usually accompanied by swelling in persons who have never been bitten before. Some individuals are hypersensitive to black fly bites, and may have a strong reaction.

Adult mosquitos have a single pair of membranous wings and can be distinguished from other flies by the presence of a long proboscis and scales on the margins and veins of the wings. Mosquitos are found throughout the world and at least 18 species have been positively identified on Mount Desert Island (Shaw, 1959). Females require a blood meal to produce eggs. The larval stage is aquatic.

Horse and deer flies are medium-sized with robust bodies. Females have biting mouth parts. Adults range from 6-30 mm in length. Body coloration ranges from black to yellowish brown. The wings are transparent and glassy and uniformly dark colored, or with a small spot or streak of color. Horse flies are usually larger than deer flies. The female horse fly is a blood sucker, while males feed on plant juices.

Refer to the Pictorial Key of Arthropods, Reptiles, Birds and Mammal of Public Health Significance for more specific identification (1967).

DESCRIPTION OF THE PEST AND POTENTIAL FOR DAMAGE:

Biting flies occur in Acadia from mid May through the first frost (September) though black flies are most abundant in June. The biting flies found in this area do not represent a significant health hazard, although these insects can be an extreme nuisance for employees working outdoors. Some individuals are hypersensitive to bites from these pests, resulting in excessive swelling and discomfort, especially

when bitten in sensitive areas such as near the eyes. Employees new to the area are often more sensitive than those who have been here previously.

PROBLEM AREAS IN THE PARK:

All areas within Acadia National Park are inhabited by biting flies but lowland wooded areas seem to be especially bad.

MONITORING AND ACTION LEVELS:

Monitoring is performed by employees and is very qualitative. There is no need, nor is it necessary to suppress biting flies in the Park. Rather, employees and visitors must learn ways to minimize impacts from these pests. Repellents may be applied whenever an individual determines that it is necessary for personal comfort.

PREFERRED TREATMENT:

The solution to this problem lies in preventing flies from landing on or biting employees. Destruction of flies is neither necessary or practical.

An approved fly repellant will be used as necessary. All label directions and application rates will be closely followed. Repellents containing 25% DEET have been shown to be most effective, and those containing 75% or more will not be approved. Alternative repellents, such as Avon's Skin So Soft, will be available to employees. If DEET is necessary it should be applied to a vest or mesh jacket rather than directly to the skin (NPS memo, 1987). Repellents containing MGK-11 have been shown to cause malformations, ovarian atrophy, and benign tumors in laboratory animals and registration of these products has been cancelled.

SOURCES:

Avon Skin-So-Soft is available locally at a cost of \$9.00 per pint (spring, 1988). An approved repellent containing DEET is available through Government Services Administration (GSA). The IPM Coordinator or purchasing agent will supply ordering details.

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United States Department of Health Education and Welfare. 1967. Pictorial keys to arthropods, reptiles, birds and mammals of public health significance. Atlanta, GA:USDHEW, Public Health Service.

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ACTION PLAN BITING FLIES - IMPACT ON HORSES

SPECIES:

Biting flies are members of the family Tabanidae. This includes species of horse flies (genus Tabanus) and deer flies (genus Chrysops).

IDENTIFICATION:

There are over 325 species of Tabanids in the United States. Adults are medium-sized to large flies with robust bodies. The females have biting mouth parts and the eyes are completely separated. Males have non-biting mouthparts and the eyes usually meet along the top of the head. Adults range from 6-30 mm in length. Body coloration ranges from black to yellowish brown. The wings are transparent and glassy and uniformly dark colored, or with a small spot or streak of color. Horse flies are generally larger than deer flies. A blood meal is required by the female for egg production.

DESCRIPTION OF PEST AND POTENTIAL FOR PROBLEM:

These biting flies are found in all wooded sections of the Park and are attracted to warm-blooded animals. Unlike stable flies which are attracted to manure, these species of biting flies have the ability to sense high concentrations of carbon dioxide which draws them to their target where they seek a blood meal.

Biting flies irritate the riding and carriage horses used for the concession stable operation. Horses react to the presence of flies by throwing their heads, kicking, or shying. This can endanger inexperienced riders, especially if the horse reacts to a sting by one of the larger flies. Flies are especially bad in July and August, but are present throughout the summer and fall. They are attracted to the horses and riders along all sections of the carriage roads.

PROBLEM AREAS IN THE PARK:

Tabanids are most common near edges of marshes, streams, and bogs. Adults prefer open areas such as roads and meadows. Although flies are a nuisance for hikers and outdoor enthusiasts throughout the Park, they present a safety problem for horseback riders. At present, the only horses used in Park operations are those at Wildwood Stable. However in the future, horse patrols may be instituted to assist visitors and monitor use of the carriage roads.

MONITORING AND ACTION LEVELS:

Monitoring is performed by stable personnel and is very qualitative. Since the presence of even one fly can

irritate a horse, there is a very low tolerance of this pest.

TREATMENT ALTERNATIVES:

The solution to this problem lies in preventing the flies from landing on the horses. Destruction of flies is not necessary or practical.

PREFERRED TREATMENT:

An approved fly repellant will be applied directly to the horses when necessary. All label directions and application rates will be closely followed. Repellents are not to be used as a stable mist. Stable personnel will record total usage at the end of the year and report it to the IPM coordinator. Since the pesticide is not being applied to government property (horses are the property of the concessioner), Maine state law requiring application by a certified applicator does not apply. (Phone conversation with Henry Jennings, 12/2/87.)

SOURCES:

Kleen-cow is available locally but is not approved for use on horses and therefore will not receive WASO approval. In the past approval has been given for Farnam Repel-X. Purchase and monitoring of use is the responsibility of the stable concessioner. The concessioner will be required to report annual use to the IPM coordinator at the end of the season.

REFERENCES:

National Park Service. 1984. Integrated pest management information manual. Washington, D.C.A: NPS Biological Resources Division.

ACTION PLAN
PURPLE LOOSESTRIFE

SPECIES: Purple loosestrife (Lythrum salicaria)

IDENTIFICATION:

A showy non-native perennial introduced from Europe, with striking rose or magenta colored floral spikelets which bloom from mid-July through the end of August. Flowers are 1/2 - 3/4" wide, with 5 or 6 petals. The lance-shaped leaves clasp the stem, and grow in pairs or sometimes in whorls of 3. Found in swamps or wet meadows, ditches, beaver ponds. Similar native plants which may be easily confused with purple loosestrife, especially in immature form, include swamp candles (Lysimachia terrestris) and many species of goldenrods (Solidago sp).

DESCRIPTION OF PEST AND POTENTIAL FOR DAMAGE:

A highly invasive alien plant which colonizes disturbed wet environments, purple loosestrife displaces indigenous wetland vegetation, including rare species and species which are of great value to wildlife. In other parts of the Northeast, it has virtually wiped out native wetland communities by establishing mono-specific stands. Once established, it is extremely difficult to eliminate. If loosestrife becomes well established in the Park and many years of seed production have occurred, the opportunity to attempt local eradication has probably been lost (Thompson, 1987), and the native community may well be irretrievable. Lythrum salicaria was noted on a list of plants of Mount Desert Island in 1928 (Wherry, 1928). However, populations remained at relatively low levels in a handful of wetlands since that time, perhaps due to a lack of disturbance coupled with heavy competition from native vegetation. Mechanical removal of beaver dams and lodges in the Bear Brook watershed in the late 1970's and early 1980's seems to have resulted in proliferation of purple loosestrife there.

PROBLEM AREAS IN THE PARK:

The most significant populations of purple loosestrife include:

- A. Park Loop Road, Beaver Dam Pond, Bear Brook - Scattered individual plants growing around the perimeter of pond. The most extensive population of loosestrife found in the Park is on the north of road in and around numerous beaver ponds and canals.
- B. Hulls Cove House Wetland - Sparsely distributed individual plants in the main section of the wetland. A large, previously hidden stand was discovered among alders on the southern margin of this wetland in 1990.

C. Compass Harbor Trail - There is a scattered population of about 30 plants adjacent to the shore.

D. The Tarn - Scattered plants on the south end of the pond. Due to the extensive wetlands downstream, this population is especially dangerous.

Very small populations have been reported in other Park areas. More detailed descriptions of infested sites and treatments are available in the Purple Loosestrife Control Annual Reports (Willey, 1988; Hazen, 1990).

MONITORING AND ACTION LEVELS:

Known locations of loosestrife plants will be inspected early in July when flowers first break into bloom. When blooms become obvious, other Park wetlands will be inspected visually for purple loosestrife invasion. Because staffing limitations restrict the number of wetlands which can be monitored each year, a priority system will be established based on the following criteria:

1. previously infected areas or wetlands in proximity to other infected wetlands
2. proximity to roads or other sources of infection such as Lythrum used ornamentally in gardens
3. areas which have not been previously inspected
4. areas which have been inspected previously and were not infected.

Care must be given to prevent seed transfer on boots or clothing by monitors who go from wetlands harboring loosestrife to unaffected areas. Footwear must be cleaned of all mud or debris and inspected before moving from one area to another. Areas which are monitored and treated will be mapped on a USGS topographic map "Acadia National Park and Vicinity" each year. The Park should strive to incorporate purple loosestrife control information into the Geographic Information System (GIS) as quickly as possible.

In addition to visual surveys, treatment success will be monitored using permanent grids of one square meter quadrats established in wetlands where loosestrife was present in 1989. Methodology, detailed in the 1989-90 purple loosestrife annual report, must remain consistent from year to year. Total stem counts of plants over 3 inches in height for each quadrat will be tabulated, and the results analyzed statistically.

Loosestrife is very difficult to eliminate once it becomes established, therefore, every effort will be made to eradicate it whenever populations are identified. The presence of even one loosestrife plant will be the threshold where eradication efforts are initiated.

PREVENTATIVE TECHNIQUES:

Purple loosestrife does not successfully invade natural plant communities, but responds to disturbance. Clearly, the most successful management method is to prevent the initial invasion of loosestrife by maintaining the integrity of natural wetlands. Any form of disturbance or stress to the native plant community should be avoided. This includes mechanical disturbance, such as the removal of beaver dams for managing beaver damage by the use of heavy equipment. Purple loosestrife has the ability to regenerate from adventitious buds growing from crushed stems whereas many of its native associates do not (Thompson, 1987). Water drawdowns should not occur after April or before August.

TREATMENT ALTERNATIVES:

A. No treatment - The no treatment alternative would result in continued spread of this alien species, with associated displacement of native vegetation and loss of the wetland ecosystem. Adoption of this alternative would result in the Congressional mandate to preserve naturally functioning native systems not to be met.

B. Mechanical - Plants may be partially managed by cutting or pulling.

Pulling - Small plants can be pulled using great care to remove the entire root system. It is much more difficult to pull large, mature plants because the root system is often very extensive.

Cutting - Cutting the flowering heads is most effective when done in the late summer (Malecki & Rawinski, 1985). A 54% reduction in shoots was reported when cutting was performed in late August, compared to 34% when cut in early August.

Cut or pulled plants must be removed from the site and destroyed, because they will form adventitious shoots if left lying on moist, unvegetated soil. However, it should be noted that cutting is not a permanent solution for elimination of loosestrife (Malecki & Rawinski, 1985). Cutting and pulling did not result in lower populations of plants at Acadia in 1987. In fact, some populations receiving this treatment actually increased in size (Willey, 1988).

C. Biological - Efforts are currently underway by the Department of Agriculture to test three promising European insect control agents. Host specificity will be included as an important aspect of their study (personal communication with G. Johnston, WASO).

Currently, there are no known natural predators with control potential in the United States. Biological control alternatives appear to be at least several years away.

- D. Chemical - Herbicide treatment studies using glyphosate have been very successful, though careful attention should be given to growth stage and timing. Although varying rates of application does not result in significantly different control, time of application does (Malecki and Rawinski, 1985). Previous studies (Monsanto Company, 1975; Kline and Selleck, 1978) indicated that treatment in the later stages of development is most effective and that timing affects the extent of loosestrife reinfestation. Glyphosate is biodegradable and quickly inactivated upon exposure to moist soils (Sprankle, 1975; Sprankle et al., 1975). It is considered to be a low hazard to fish and wildlife (Batt et al., 1980). Despite the promise of early investigations of the use of glyphosate, Rawinski (1982) cautioned against its widespread use without adequate knowledge of the effects of this relatively new chemical on marsh ecosystems. See-2,4-D@ is currently being used for purple loosestrife control at Voyageurs National Park in Minnesota (Benedict & Grim, 1989). While this herbicide is more selective, it has not been extensively tested in the East as has glyphosate. Should purple loosestrife populations at Acadia become resistant to Rodeo@, it would be beneficial to switch to See-2,4-D@ or another broadleaf herbicide approved for aquatic sites.

PREFERRED TREATMENT STRATEGIES:

Due to the highly detrimental nature of this invasive plant, every effort should be made to assure complete and continuous suppression of all identified populations as soon as possible. A chemical control program is the only effective method of protecting native wetlands at this time. Current populations must be held in check until more effective chemicals or biological control agents have been adequately tested and are approved for use.

However, chemical suppression alone will not maintain native wetland systems free of purple loosestrife. Chemical suppression must be integrated with:

- public education to inform visitors, neighbors and employees of the impacts of uncontrolled purple loosestrife invasion and the Park's management program
- cooperation with local nursery owners to reduce or eliminate the use of Lythrum ornamentally

- cooperation with state officials and other land management agencies (The Nature Conservancy Audubon, etc.) to share information on loosestrife suppression and work toward noxious plant legislation
- education, and where appropriate, cooperative control agreements with local landowners to reduce or eliminate the risk of invasion from adjacent lands
- continued literature review of scientific information on the ecology, biology, and management of Lythrum salicaria
- support of scientific research on purple loosestrife or the possible effects of herbicide contamination on soils, native plants, or water by private and public organizations and agencies.

Park field staff within all divisions will be alerted to look for purple loosestrife during their daily activities and will be given a guide to assist in Lythrum identification. Quantitative monitoring in permanent plots will be completed as necessary to monitor population levels and treatment effectiveness.

Prior to herbicide treatment, approval must be obtained from the Department of Agriculture, National Park Service, and the Maine Board of Pesticide Control. Newly infested wetlands which have not been previously checked will be inspected for the presence of rare and endangered plants before chemical treatment begins. Staff of visitor contact stations will be notified when management actions begin, so that they may answer visitor questions and educate the public about the park's purple loosestrife suppression program. In order to implement chemical management techniques at least one and preferably two staff members in the Division of Natural Resources and Science will maintain pesticide applicator certification in the aquatic category. In addition, safety briefings will be held before treatment is initiated each summer for all personnel involved in purple loosestrife management. Treatment actions, including amounts of herbicide application, and level of success will be documented in writing and yearly use logs will be submitted to the North Atlantic Regional Office and the Maine Board of Pesticide Control.

Herbicide will be applied by hand sprayer and care will be taken to minimize application to non-target plants. Treatment will be made only when ground wind speeds are low enough to prevent pesticide drift to non-target plants. Treated areas will be checked to assess

treatment success and detect reinfestations. Other wetlands will be monitored visually to detect new populations so that they may be treated as soon as possible.

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*Cutting top of trees
vs. whole trees.*

**ACTION PLAN
RIGHT OF WAY VEGETATION CONTROL**

SPECIES OF CONCERN:

Any woody trees and shrubs are of concern. Also, tall herbaceous plants.

DESCRIPTION OF THE PROBLEM:

Several companies, governmental agencies, and individuals have transportation or utility rights-of-way through the Park. Vegetation management is necessary to keep lines free from disturbance. Along roadsides, woody plants heave pavement, reduce structural integrity of bridges, and leaf litter disrupts drainage. Vegetation along roadsides must be managed to maintain adequate sight distance and ensure safety. Signs may be obstructed from view when vegetation becomes too tall.

MONITORING AND ACTION LEVELS:

Park roadsides and ditches are monitored visually by the maintenance staff. Action levels are met whenever a safety hazard occurs, or when vegetation touches power or telephone lines.

TREATMENT STRATEGIES:

1. Mechanical: Vegetation along park roads may be effectively managed by mechanical means to ensure visibility and safety. Mowing and brush cutting is an effective way of maintaining roadsides and right-of-ways, but may not be sufficient to prevent damage on carriage road bridge surfaces.
2. Mulching: In some situations, for example near public buildings, mulching using shredded bark may be effective. Living mulches such as certain ground covers may also be used. However, care should be taken that any plantings are of native stock.
3. Chemical: The use of chemicals should be discouraged as much as possible. However, if herbicides are the only effective alternative, Regional and WASO approval is necessary before treatments begin, and special State regulations previously listed in this plan may apply. Consult the attached key for treatment choices.

PREFERRED TREATMENT:

Vegetation along right-of-ways and roadsides maintained by the park will be managed through mechanical means. This includes vista clearing along roadways. Roadsides are mowed annually. Woody vegetation is cut back on a five year rotation - that is, the equivalent of five years growth is

removed so that the process does not need to be repeated more than once every five years. Management of woody vegetation which grows on carriage road bridges may require the use of an approved herbicide. Upon anticipated use of herbicides, the Roads and Trails Foreman will notify the IPM Coordinator so that prior approval can be obtained. Additionally, one or more crew members will become State certified so that herbicides may be applied in compliance with Maine laws.

According to a spokesman from DOT, there are no plans for herbicide use on Mount Desert Island (personal communication with Carroll Schell, 1986). Chemicals used by DOT in the past have included Garlon 4, Velpar Gridball, Banvel XP pellets, and XG granules. Any State DOT treatments scheduled for roads or right-of-ways within or adjacent to the Park will be approved prior to treatment by the Park IPM coordinator. Notification must be at least one month prior to treatment so that NARO, WASO, and Maine Pesticide Control Board approval may be obtained.

TREATMENT KEY:

This key is a guide only. Check with the Regional IPM Coordinator for confirmation of suggested herbicides and for current recommendations where none are listed.

- A. Weeds near water.....Rodeo@ or Ammate@
- B. Weeds not near water.
 - 1. Selective herbicides.
 - a. For grasses.
 - i. For annual grasses.
 - aa. In grass.....
 - bb. In broadleaves.....
 - ii. For perennial grasses.
 - aa. In grass.....
 - bb. In broadleaves.....
 - b. For broadleaves.
 - aa. In grass.....
 - bb. In broadleaves.....Spot treatment
with Round-up@
 - 2. Non-selective herbicides.
 - a. For annuals.....Mechanical treatment
 - b. For perennials.
 - i. Herbaceous spp.....Roundup@ or
Ammate@
 - ii. Woody spp..... Roundup@ or
Ammate@

REFERENCES:

National Park Service. 1984. Integrated pest management information manual. Washington, D.C. NPS, Biological Resources Division.

1982 severe
defoliation
by gypsy moth -
Not treated

OVERVIEW
FOREST INSECTS AND DISEASES

I. SPECIES: Gypsy Moth (Lymantria dispar)

DESCRIPTION OF THE PROBLEM:

The gypsy moth was discovered on Mount Desert Island during 1924. The larvae of the moth attack a wide variety of hosts, especially oaks, beech, birch and other deciduous species. High populations can completely defoliate a tree and successive defoliations can cause mortality. The population increased in the 1930's, and subsequently, suppression measures were first undertaken. Lead arsenate and later DDT were used to suppress the moth. After control measures were discontinued in the 1960's, the gypsy moth has not caused significant defoliation. In 1982, pheromone traps were set out to begin population trend monitoring. The monitoring, a cooperative effort with the U.S. Forest Service, will continue.

MANAGEMENT ACTIONS:

No suppression program is anticipated. Monitoring will continue in order to determine population and injury levels. Locations of monitoring sites will be mapped and kept in the files of the Division of Natural Resources and Science.

2. SPECIES: Spruce Budworm (Choristoneura fumiferana)

DESCRIPTION OF THE PROBLEM:

The larvae of this small moth feeds on spruce and fir species of the Northeastern United States. The balsam fir is most heavily damaged. In heavy infestations, defoliation is most noticeable at the tops of the infested trees. After several years of heavy defoliation, large stands of spruce fir forests will be gray with dead tree tops. With the exception of Schoodic Peninsula, there has not been a significant infestation of Spruce budworm in Acadia. In 1940, infested trees along the roadside of Schoodic Drive were treated with lead arsenate. No suppression measures have been taken since. A population trend monitoring program was started in 1985 on Mount Desert Island. This program, a cooperative effort with the U.S. Forest Service, will continue. Locations of monitoring sites have been mapped and are available, along with monitoring results, in the Science and Natural Resources files.

MANAGEMENT ACTIONS:

No suppression program is planned.

3. DISEASE: Beech Bark Disease

DESCRIPTION OF THE PROBLEM:

This is an insect-fungus complex affecting American beech trees. The insect is the beech scale (Cryptococcus fagisuga) whose larvae feed through the bark leaving a wound. The scale alone does not cause significant damage to the tree. The fungus Nectria sp. presumably enter through wounds left by the scale. Heavy attacks on small beech trees is rare, and in most cases, only trees with a diameter of 8 inches or greater are severely affected or die. Beech bark disease was first discovered on Mount Desert Island in the 1930's. Infected trees were removed and burned. New infestations were later discovered and lime sulphate was then used. The spraying continued every few years until the 1950's. Many trees are now infected. Visual monitoring has been done on an annual basis since 1977 by the U.S. Forest Service.

MANAGEMENT ACTIONS:

Because of the scope and nature of the problem, no management program is planned. Monitoring will continue in cooperation with the Forest Service.

4. DISEASE: White Pine Blister Rust

DESCRIPTION OF THE PROBLEM:

White pine blister rust, caused by a rust fungus Cronartium ribicola, is a branch and stem canker disease. The infection usually begins in the pine's needles then spreads to the branches and stems. If the rust reaches the trunk, death will result. However, not all infections reach the trunk. In order for the rust to spread to another white pine, it must go through a secondary host. The secondary hosts are plants from the Ribes genus (gooseberries and currants). The Ribes plants are not damaged by the fungus. White pine blister rust was first discovered on Mount Desert Island in 1929. Suppression measures started in the 1930's and continued into the 1970's. Management was in the form of mechanical removal of the secondary host Ribes. Thousands of man-hours were expended on this project. Blister rust is uncommon in the Park today.

MANAGEMENT ACTIONS:

No management measures are planned. Monitoring is by annual visual inspection by the U.S. Forest Service.

OTHER POTENTIAL PROBLEMS

The following pest species may require manager future:

*Oriental & American
will hybridize.*

Keith Langdon-

1. Oriental (Asiatic) Bittersweet (Celastrus):
A non-native vine that grows conspicuous ground or on shrubs and trees, oriental threat only to individual native trees that smothers.
2. Japanese Knotweed (Polygonum cuspidatum):
Japanese knotweed is a perennial herb that has the appearance of a woody shrub. It is spreading from the south and colonizes waste places, especially roadsides. It establishes itself by reproducing by seeds and rhizomes and excludes all other plants. It is easily identified because it resembles bamboo and has conspicuous, large leaves with white flowers in August and September.
3. Golden Chaintree (Laburnum x watereri):
This very showy, non-native, small tree has escaped from landscaped areas. It is typically found along roadsides and on the edge of clearings, especially in the Bar Harbor and Seal Harbor areas. Once established, a particular tree may spread by root suckers to form a dense stand. It poses no threat to native plants, but the highly visible plant looks incongruous with the surrounding native vegetation along the Park Loop Road.
4. Japanese and Common Barberry (Berberis thunbergii and Berberis vulgaris):
Both of these species are thorny shrubs which spread into natural settings from landscaped areas. They reproduce by seeds and new shoots from spreading roots. The invasive nature of this species should be considered when setting priorities for exotic plant control.
5. Mammal pests in structures: House mouse (Mus musculus), Red squirrel (Tamiasciurus hudsonicus), gray squirrel (Sciurus carolinensis), raccoon (Procyon lotor). These animals invade structures seeking shelter and food. They are tolerant of humans, but usually humans are not tolerant of them. While infestations in structures are rare, they are usually dealt with by live trapping the offenders and relocating them outdoors. Access sites in structures should then be sealed to prevent reinfestation. If live trapping is not effective or possible, kill traps may be necessary, especially with mice.

6. Deer browsing on ornamental plants: In the past, white-tailed deer (Odocoileus virginianus) have destroyed ornamental plantings around Park structures. Many alternatives have been tried to deter deer from impacting these plantings with little success, including the use of commercial deer repellants. The most effective way of dealing with this problem may be to use native plants which are not attractive to deer. Northern white cedar (Thuja occidentalis) and mountain laurel (Kalmia latifolia) are highly attractive and should not be used as landscape plants.
7. Wood destroying fungi: Structural timbers are jeopardized by wood destroying fungi. Lumber may be treated with wood preservatives to prevent this problem. NPS approval for the use of a wood preservative is routinely acquired in anticipation of any building projects in the Park. Care must be exercised in treating wood to be used on picnic tables or in other instances where the wood could come in contact with food.
8. Raccoon/human conflicts: Despite public notices and verbal warnings from rangers, campers feed raccoons (Procyon lotor) at Seawall and Blackwoods Campgrounds. They quickly lose their fear of humans and become health threats to visitors and employees. In addition, raccoons raid garbage cans, scattering garbage hither and yon.
9. Bear/human conflicts: Although the population within the Park is very low, black bears (Ursus americanus) occasionally conflict with humans by raiding garbage cans in the picnic areas and campgrounds, and frequenting areas of high visitor use. If the resource management staff determines that a bear poses a threat to visitor or employee safety, the Maine Department of Inland Fish and Wildlife will be notified. Working cooperatively with their staff, the bear will be live trapped and relocated away from the area of concern.

General monitoring and awareness will determine the presence and extent of problem posed by these exotics and pests. Once identified, an action plan will be determined by the park IPM coordinator. Comprehensive plans will then be added to the park IPM plan as needed.

PESTICIDE REGULATIONS

BOARD OF PESTICIDES CONTROL

**Maine Department of Agriculture
Augusta, Maine 04333**

August, 1990

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Chapter 1

RULES OF PROCEDURE GOVERNING PESTICIDE HEARINGS

1. Scope

These rules of procedure shall be applicable to public hearings before the Commissioner of Agriculture and the Board of Pesticides Control on the following subjects:

A. Determination by the Commissioner of Agriculture, pursuant to the Maine Pesticide Control Act of 1975, as amended, 7 M.R.S.A. § 601, et seq., and approval of such determinations by the Board of Pesticides Control, pursuant to 22 M.R.S.A. § 1471-A, et seq., relating to the refusal to register or renew registration, the cancellation, suspension, or limitation of registration of any pesticide registered or proposed to be registered for use in the State of Maine; and

B. The terms and conditions that the Board of Pesticides, pursuant to 22 M.R.S.A. § 1471-A, et seq., considers necessary to place on licenses to apply pesticides which the Commissioner proposes to regulate pursuant to section 1(A). These rules of procedure shall not be applicable to emergency rule-making procedures on any of the foregoing subjects.

These rules of procedure shall not be applicable to emergency rule-making procedures on any of the foregoing subjects.

2. Definitions

A. The term "Commissioner" shall mean the Commissioner of the Maine Department of Agriculture, Food and Rural Resources or a designee of the Commissioner.

B. The term "Board" shall mean the Maine Board of Pesticides Control.

C. The term "Department" shall mean the Maine Department of Agriculture, Food and Rural Resources.

D. Other terms used in these rules of procedure shall have the same meanings as defined by the Maine Pesticides Control Act of 1975, as amended 7 M.R.S.A. § 601, et seq. and 22 M.R.S.A. § 1471-A, et seq. unless more specially defined herein or the context of these rules of procedure requires a different meaning.

3. Procedures for Initiating Rule-Making

A. By the Commissioner: The procedure for proposing determinations by the Commissioner which are the subject of Section 1(A) of these rules of procedure shall be for the Commissioner to public notice of a proposed determination and a public hearing thereon pursuant to Section 4 hereof.

B. By the Board:

1. The procedure for action by the Board on proposed determinations by the Commissioner which are within the scope of Section 1(A) of these rules of procedure shall be for the Board to publish notice of a public hearing on any proposed determination by the Commissioner pursuant to Section 4 of these rules.
2. The procedure for proposed rules by the Board which are within the scope of Section 1(B) of these rules of procedure shall be for the Board to publish notice of a public hearing on any proposed license terms and conditions, pursuant to Section 4 of these rules.

C. By Petition: Any person may petition the Commissioner or the Board for the adoption or modification of a rule which is within the scope of these rules of procedure in accordance with the rules of the Department entitled "Petition for Agency Rule-Making".

D. Upon receipt of a petition to initiate rule-making proceedings, the Commissioner or Board shall forward a copy of the petition to the registrants of the product which is the subject of the petition.

4. Notice

A. Notice of public hearing within the scope of these rules shall be given at least twenty (20) days prior to the date of the hearing to:

1. The registrant or proposed registrant of the pesticide which is the subject of the hearing;
2. Any person who has filed with the Department or Board a written request for notice of rule-making on this subject within the past year;
3. Any trade, industry, professional, environmental, interest group or regional publication that the Department or the Board deems effective in reaching the persons affected; and
4. The Secretary of State for publication in accordance with 5 M.R.S.A. § 8053.5

B. In the case of a proposed determination by the Commissioner to refuse

registration, or to cancel or suspend registration of a pesticide, pursuant to 7 M.R.S.A. § 609, notice shall be delivered to the registrant or proposed registrant by registered mail, return receipt requested. In all other cases, notice shall be delivered by first class mail to the last known address of the person or group to be notified.

C. The notice shall specify:

1. The statutory authority pursuant to which hearings will be held;
2. The time and place of the public hearing;
3. The manner and time within which data, views or arguments may be submitted for consideration by the Commissioner and the Board, including the requirements and time limits for filing pre-filed testimony;
4. The express terms of any proposed rule of the Commissioner or the Board, or a summary thereof, stating the subjects and issues involved and indicating where a copy of the complete text of the proposal can be obtained;
5. The time period during which applications for intervenor status must be filed; and
6. The time of the prehearing conference.

5. Presiding Officer

A. The Commissioner and the Board may jointly authorize, subject to Subsection B hereof, any one of the following to act as presiding officer of a hearing which is the subject of these rules of procedure:

1. The Commissioner,
2. The Chairperson of the Board,
3. A member of the Board,
4. An employee of the Department or the Board, or
5. A representative of the Commissioner or the Board.

B. If the presiding officer is the Commissioner or an employee of the Department or representative of the Commissioner, all acts of the presiding officer must receive the

concurrence of the Chairperson of the Board, or a member, employee or representative of the Board designated by the Board for such purposes. Likewise, if the presiding officer is the Chairperson of the Board, or a member, employee, or representative of the Board, all acts of the presiding officer must receive the concurrence of the Commissioner, or a representative of the Commissioner or employee of the Department designated by the Commissioner for such purposes. In the absence of concurrence, disagreement shall be noted on the record and the evidence which is excluded or admitted over the objection of the non-concurring party shall be separately taken into account by the Commissioner and the Board in their separate determinations as provided by these rules.

C. Whenever a presiding officer is disqualified or unable to continue the hearing, another presiding officer may be assigned as a substitute to continue with the hearing.

D. Subject to the provisions of subsection B hereof, and any limitation set by the authorization of the presiding officer to act as such, the presiding officer shall have the authority to:

1. Administer oaths and affirmations;
2. Rule on the admissibility of evidence;
3. Regulate the course of the hearings, set the time and place for continued hearings and fix the time for filing of evidence, briefs and other written submissions;
4. Rule on applications for intervenor status, subject to the provisions of § 8 hereof;
5. Permit deviations from these procedural rules as provided for in § 7 hereof; and
6. Take such other action authorized or contemplated by these rules of procedure or as may be ordered by the Commissioner or the Board that is necessary for the efficient and orderly conduct of the hearing.

6. Bias of Presiding Officer or Board Member

A. Hearings shall be conducted in an impartial manner. Upon the filing in good faith by a party of a timely charge of bias or of personal or financial interest, direct or indirect, of a presiding officer or a member of the Board in the proceeding requesting that such person disqualify himself, that person shall determine the matter as a part of the record.

B. The person involved may consult with private counsel or the Attorney General's

Office concerning any such charge.

7. Deviation from Rules

The Commissioner and the Board, together or through the presiding officer, may permit deviation from these procedural rules when necessary or helpful to the achievement of the objectives of the hearings which are the subject of these rules of procedure.

8. Intervention: Pre-filed Testimony

A. Upon application in accordance with the time limits specified in the notice of the hearing, the presiding officer may designate intervenors in any hearing which is the subject of these rules of procedure.

B. Intervenors may include organizations and agencies of federal, state or local government and shall, upon proper application, include registrants.

C. The presiding officer shall allow any person to intervene who shows that he/she is or may be a member of a class which is or may be, substantially and directly affected by the proceeding and possesses an ability to participate actively and fully in the proceedings in accordance with subsection F hereof.

D. The presiding officer may also allow any other interested person to intervene or participate as a full or limited party to the proceeding. This subsection shall not be construed to limit public participation in the proceeding in any other capacity.

E. Where appropriate, the presiding officer may require consolidation of presentations of evidence, cross-examination and argument by members of the class entitled to intervene under subsections B and C, or by persons allowed to intervene under subsection D hereof. In determining that any party shall be required to consolidate its presentation, cross-examination and argument, the presiding officer shall consider the number of parties, the interests of each party, whether they propose to offer testimony or participate only by cross-examination, and the nature and extent of their proposed testimony. No party shall be required to consolidate where it is clear that the party will, as a consequence of the consolidation, be unable to make an adequate presentation of that person's position.

F. All persons designated as intervenors shall be required to:

1. Prepare or present any and all direct testimony and evidence in writing in advance of the time when the testimony is to be given, at the time specified in the notice of the hearing.

2. File with the Commissioner and the Board, ten copies of each written document presented to the Board and Commissioner and serve one copy of any written document presented to the Commissioner and the Board on all other designated intervenors.

9. Participation by Staff

Staff of the Commissioner and the Board may appear and participate in the hearings. Evidence which the Commissioner or members of the Board wish to place in the record may be presented by staff. Staff shall not be subject to the pre-filed testimony requirements of 8(F) hereof, but shall make any documentary evidence to be presented available for inspection and copying to interested persons, including intervenors, in advance of the hearing if possible.

10. Public Testimony

- A. At an appropriate time during each session of the hearing, members of the public wishing to make statements shall be given the opportunity to do so.

- B. The procedure for the testimony from the public shall be as follows:

1. At the beginning of each session, the presiding officer may announce the concerns which are expected to be covered by that session. The concerns may include, but are not limited to:

- a. Potential health risks posed by the pesticide;
- b. Agricultural uses of the pesticide;
- c. Silvicultural uses of the pesticide;
- d. The utility of the pesticide in integrated pest management; and
- e. Viable alternatives to use of the pesticide.

2. The presiding officer will make available a sign-up sheet for those members of the public wishing to present their views on these concerns.

3. At an appropriate time during the session, the presiding officer will announce the time of day when the public testimony may be given and the period of time to be allowed for each person so testifying.

11. Pre-Hearing Conference

The presiding officer may, at such time as specified in the notice of the hearing, hold a pre-hearing conference for the following purposes:

- A. Ruling on applications for intervenor status which have not yet been determined;
- B. Ruling on other motions;
- C. Formulating or simplifying issues;
- D. Marking exhibits;
- E. Limiting the number of witnesses and consolidating the presentation of evidence, cross-examination of witnesses, and arguments of parties; and
- F. Providing for procedures to be followed at the hearing and for any other purpose that may expedite the orderly conduct and disposition of the proceeding.

12. General Conduct of Hearing

- A. Opening Statement: The presiding officer shall open the hearing by describing in general terms the purpose of the hearing and the general procedure governing the conduct.
- B. Transcription of Testimony: All testimony at a hearing shall be recorded and, if necessary, transcribed.
- C. Witnesses: Witnesses shall be sworn. Witnesses will be required to state for the record their name, residence and who they represent, if anyone, for the purpose of the hearing.
- D. Testimony: All persons offering testimony in written form may offer a brief oral summary of the writing. All persons offering testimony in written form may be subject to questioning. This sub-section D shall not be construed to prevent oral testimony at a scheduled hearing by any member of the public who requests and is granted time to testify.

13. General Evidence

- A. Admissibility: Evidence which is relevant and material to the subject matter of the hearing and is of the type which reasonable persons are accustomed to rely upon in the conduct of serious affairs shall be admissible. Evidence which is irrelevant or unduly repetitious shall be excluded.
- B. Official Notice:

1. The Commissioner and the Board may, at any time, take official notice of any facts of which judicial notice could be taken, and of general, technical or scientific matters within their specialized knowledge and the statutes, regulations and non-confidential agency records.
2. Notwithstanding subsection 1 hereof, both the Commissioner and the Board may rely upon their experience, technical competence and specialized knowledge in the evaluation of evidence presented to them.

C. Documentary and real evidence:

1. All documents, materials and objects offered in evidence as exhibits shall be numbered or otherwise identified. The presiding officer may require that any person offering any documentary or photographic evidence shall provide the Commissioner and the Board with a specified number of copies of such documents or photographs in advance of the hearing, unless they are determined to be of such form, size or character as not to be reasonably susceptible of reproduction.
2. All written testimony and documents, materials and objects admitted into evidence shall be made available during the course of the hearing for public examination and also made available for public examination at the offices of either the Commissioner or the Board in Augusta during normal business hours.
3. Documentary evidence may be received in the form of excerpts if the entire document from which a portion is excerpted is available for inspection by the Commissioner, the Board and parties at the hearing.

D. No sworn written testimony may be admitted unless the author is available for cross-examination, except for good cause shown. Documentary evidence, in the form of scientific or technical reports, articles, books and other publications and reports, may be admitted into evidence, even though the author is unavailable for questioning subject to exclusion by the presiding officer on the basis of the nature of the material submitted or the availability of the author.

E. All objections to rulings of the presiding officer regarding evidence, procedure and the grounds therefore shall be timely stated during the course of the hearing. If, during the course of or after the close of the hearing and during its deliberations, the Commissioner or the Board determines that a ruling of the presiding officer was in error, it may reopen the hearing or take such other action as it deems appropriate to correct such error.

14. Testimony

In the absence of an indicated procedure to the contrary, direct testimony shall be offered in the following order:

- A. Staff and consultants of the Commissioner and the Board;
- B. Where the hearing is conducted in response to a petition, the person who filed the petition;
- C. Registrants;
- D. Other intervenors; and
- E. Members of the public.

15. Questions

- A. The Commissioner, members of the Board, staff, consultants and counsel for the Commissioner and the Board may ask questions at any time.
- B. Persons generally will be permitted to present questions in the same order as specified for direct testimony, subject to the provisions of subsections C and D hereof.
- C. Cross-examination by registrants and other intervenors shall be limited to:
 - 1. Areas relevant to the subject matter of the proceeding which are not repetitious of written or oral questions asked by others; and
 - 2. Questions which will not unduly extend the proceedings.
- D. A person who is not an intervenor may ask questions only after he/she has received the presiding officer's permission to do so. The presiding officer may place conditions upon such questioning, including the provision that such questions be submitted in writing to and asked by the presiding officer.

16. Continuance

All hearings conducted pursuant to these rules of procedure may be continued for reasonable cause and reconvened from time to time and from place to place by the presiding officer as circumstances require. All orders for continuance shall specify the time and place at which such hearings shall be reconvened.

17. Subpoenas

A. Any person may request the issuance of a subpoena by the Commissioner or the Board to compel the attendance of witnesses and the production of books, documents and records anywhere in the State in any hearing which is the subject of these rules of procedure, provided that only the Board may issue a subpoena when it relates to the subjects described in Section 1(B) of these rules of procedure.

B. Subpoenas will be issued only when the testimony or documents sought by subpoena are relevant to any issue of fact in the proceeding.

C. Subpoenas will be issued in accordance with the following procedure:

1. Subpoenas requested may only be issued when request therefore is made to the Commissioner or the Board at least ten (10) days prior to the date for the hearing, unless good cause is shown why such request could not have been made at such time.

2. The form of the subpoena shall be similar to that used in civil cases before the courts. Witnesses subpoenaed shall be paid the same fee for attendance and travel as in civil cases before the court and such fees shall be paid by the person requesting the subpoena.

18. Conclusion of the Hearing

A. At the conclusion of the hearing, no other evidence or testimony will be allowed into the record, except as provided by subsection B or 19 of these rules.

B. Written statements and briefs concerning the proposed rule, as well as proposed findings of fact and conclusions of law, may be filed with the Commissioner or Board within 10 days after the close of the public hearing, or within such longer time as the agency may direct.

19. Reopening of Record

At any time prior to a final decision, the Commissioner or the Board may reopen the record for further proceedings, consistent with these rules and procedures provided that the Commissioner and the Board shall provide timely notice of such further proceedings prior to such proceedings.

20. Record

A. The record shall consist of:

1. All applications, pleadings, motions and preliminary rulings and orders;
2. Evidence received or considered;
3. All staff memoranda submitted to the Commissioner or members of the Board, by Board staff or the Commissioner's staff in connection with their consideration of the case, except memorandum of counsel of the Commissioner or the Board;
4. The determination of the Commissioner; and
5. The decision of the Board.

B. The Commissioner and the Board shall make a copy of the record, including a recording of the testimony in a form susceptible to transcription, available at the office of the Board in Augusta, for inspection by any person during normal business hours, and shall make copies of the record, including copies of recordings or transcriptions of recordings, available to any person at actual cost, which shall be deemed to be .10 a page in cases of photocopying. Notwithstanding the provisions of this sub-section, the Board or the Commissioner may withhold, obliterate or otherwise prevent the dissemination of any portions of the record which are made confidential by State or Federal statute.

C. The decision by the Commissioner and the Board shall be limited to a consideration of the record.

21. Decisions

A. The Commissioner shall render his determination on proposals which are the subject of 1(A) of these rules of procedure prior to any determination by the Board.

B. Within seven (7) days of the date when the Commissioner's determination has been mailed to each party to the proceedings, any such party may file a supplemental brief to the Chairman of the Board setting forth such party's views as to why the Board should or should not approve the Commissioner's determination. Such briefs may also include arguments in support of any motion to re-open the record in view of the determination of the Commissioner.

C. Decisions of the Commissioner and the Board made at the conclusion of these procedures shall be in writing and shall include the factual and policy basis for the

determination. The Board shall maintain a record of the vote of each member of the Board with respect to the Board's decision. A copy of the decisions shall be delivered or promptly mailed to each party to the proceeding or his representative of record.

2. Time Calculations

In computing any period of time prescribed by these rules of procedure or otherwise specified in the course of the hearing by the presiding officer or otherwise, the day of the act or event after which the designated period of time begins to run is not to be included. The last day of the period so computed is to be included, unless it is a Saturday, a Sunday, or a holiday. When the period of time prescribed or specified is less than 7 days, intermediate Saturdays, Sundays and holidays shall be excluded in the computation.

For the purpose of this section, legal holidays shall include days on which the Chief Justice of the Supreme Judicial Court specifically orders the Clerk's office closed.

AUTHORITY: 5 M.R.S.A. § 8051, et. seq.; 7 M.R.S.A. §§ 601 - 610; 22 M.R.S.A. §§ 1471-A, 1471-B, 1471-C, 1471-D, 1471-M.

EFFECTIVE DATE: October 27, 1978.

Chapter 10

DEFINITIONS AND TERMS

SUMMARY: These definitions and terms are defined as they specifically relate to the use of pesticides and the certification and licensing of pesticide applicators and dealers in succeeding chapters.

1. Consistent with Statute

All terms used in these Chapters shall be defined as indicated in Title 22 M.R.S.A., Chapter 258-A unless specifically provided herein.

2. Definitions

A. The term "aerial applicator" shall include all persons who dispense pesticides by means of any machine or device used or designed for navigation of or flight in the air. All aerial applicators shall be considered commercial applicators and shall be individually certified. An aerial applicator must also possess a "Certificate for Dispensing of Chemicals by Aircraft" from the Maine Bureau of Aeronautics before making any chemical applications.

B. The term "applicant" shall mean a person or persons who apply for a certification, license or permit authorized in 22 M.R.S.A. § 1471-D or § 1471-N.

C. The term "board" shall mean the Board of Pesticides Control as established in 22 M.R.S.A. § 1471-B.

D. The term "commercial applicator" as defined in 22 M.R.S.A. § 1471-C(5) shall include governmental employees, such as employees of federal, state, county, and municipal governments and of the University of Maine.

E. The term "custom application" shall mean any application of a pesticide under contract or for which compensation is received, or any application of a pesticide to a property open to use by the public.

I. For purposes of this definition, compensation is deemed to have been received for a pesticide application where any form of remuneration has been or will be exchanged, including by payment of cash, rent, or other financial consideration, or by the exchange of goods and/or services.

II. For purposes of this definition, property is deemed to be open to use by the public where its owner, lessee or other lawful occupant operates, maintains or

holds the property open for routine use by members of the public. Persons are considered to be members of the public even though they may pay a fee or other compensation in order to make use of the property or may visit the property for a commercial purpose.

III. Notwithstanding this definition, property shall not be deemed to be open for use by the public in the following cases:

- (i) where the property is devoted primarily to agricultural, forest, ornamental tree or plant production, but this exception shall not apply to roads within such property which are open for use by the public;
- (ii) where the public has not been permitted upon the property at any time within seven days of when the property received a pesticide application;
- (iii) forestry rights of way where the property has been closed during the time of spraying or during the label re-entry period, whichever is greater.

IV. Examples of property open to use by the public include without limitation: shopping centers, office and store space routinely open to the public, common areas of apartment buildings, schools and other public institutional buildings, public roads, organized recreational facilities, golf courses, campgrounds, parks, and parking lots. Examples of property not open to use by the public include without limitation: farms, forestlands, and private residential or commercial property which is not routinely operated or maintained for use by the public or otherwise held open to public use.

V. A pesticide application shall not be deemed a custom application where it is undertaken by a licensed private applicator on property owned or rented by him or his employer or in trade for personal services between producers of agricultural commodities.

F. The term "license" shall mean a commercial applicator license, a private applicator certification, a dealer license, a permit to chemically control vertebrate animals, a permit for aquatic application or a permit to apply limited use pesticides.

G. The term "owner" shall mean sole proprietor, partner or stockholder.

H. The term "person" shall mean any individual, partnership, fiduciary, corporation, governmental entity, association or public or private organization of any character, other than the Board.

I. The term "pesticide dealer" means any person who distributes limited or restricted-use pesticides, including but not limited to salesmen and manufacturers' representatives selling pesticides directly to the consumer.

J. The term "supervisor" shall mean the supervisor of the Board of Pesticides Control.

AUTHORITY: Title 22 M.R.S.A., Chapter 258-A.

EFFECTIVE DATE: July 6, 1979

AMENDMENT EFFECTIVE: April 27, 1988

Chapter 20

SPECIAL PROVISIONS

SUMMARY: These provisions regulate the use, storage and disposal of pesticides with specific emphasis on registered pesticides, aquatic applications and employer/employee requirements.

1. Registered Pesticides

A. The use of any pesticide not registered by the Maine Department of Agriculture in accordance with Title 7 M.R.S.A. 601 is prohibited except as otherwise provided in subsection 1(B).

B. The use of registered pesticides for other than registered uses, or at greater than registered dosages, or at more frequent than registered intervals is prohibited, provided that application or use of unregistered pesticides and unregistered applications or uses of registered pesticides may be made for experimental purposes if in accordance with requirements of the Maine Department of Agriculture, and the U.S. Environmental Protection Agency.

2. Right-of-Way

Deciduous growth over six feet in height and evergreen growth over three feet in height shall not be sprayed with a herbicide within the right-of-way of any public way except that deciduous growth which has been cut to the ground and which has grown more than six feet during the growing season following the cutting, may be sprayed that following season. In addition, chemical pruning of single limbs of trees over the prescribed heights may be performed.

3. Pesticide Storage and Disposal

Prior to disposal, unused pesticides, whether in sealed or open containers, must be kept in a secure enclosure and otherwise maintained so as to prevent unauthorized use, mishandling or loss; and so as to prevent contamination of the environment and risk to public health.

B. 1. Obsolete, expired, illegal, physically altered or unused pesticides, except household, domestic, and institutional products, shall be either

- (a) stored in a secure, safe place under conditions that will prevent deterioration of containers or any contamination of the environment or risk to public health, or
- (b) returned to the manufacturer or formulator for recycling, destruction, or disposal as appropriate, or
- (c) disposed of in an authorized high temperature incinerator or special waste or hazardous waste landfill or other approved disposal site that meets or exceeds all current requirements of the Maine

Department of Environmental Protection and the U.S. Environmental Protection Agency for facilities receiving such waste.

2. Unused household, domestic, and institutional pesticide products shall be disposed of in accordance with label instructions.

C. Container residues and rinsates added to spray tanks and applied for the purposes stated on the pesticide label are not considered to be in violation of this section.

4. Aquatic Applications

A. No person, firm, corporation or other legal entity shall for the purpose of controlling aquatic pests, apply any pesticide to or in any river, stream, brook, creek or other waterway; any marsh, pond, lake or body of water that drains into such waterway; any body of water used for public or private water supply; any great pond; any coastal wetland as defined in Title 12 M.R.S.A. 4701 or any tidal waters without approval of the Board. (NOTE: This section was revised in 1981 to require approval instead from the Maine Department of Environmental Protection but no housekeeping revision was ever done to this portion of the regulation.)

B. Applications for approval shall be made to the Board in writing and shall include a complete description of the area of application, the pesticide to be employed, the necessity of such application, the likelihood of harm to human health or the environment, the qualifications of the applicant, and such further data as the Board may subsequently require. (SEE NOTE ABOVE.)

C. Any pesticide application made under the provisions of this regulation must be reported to the Board on forms furnished by the Board within ten calendar days of such application.

5. Employer/Employee Requirements

A. Any person, certified by the Board to apply pesticides, shall acquaint his employees and those working under his direction with the hazards involved in the handling of the pesticides to be employed as set forth on the pesticide label, and shall instruct such persons as to the proper steps to be taken to avoid such hazards.

B. All persons applying pesticides shall provide, for the protection of their employees and persons working under their direction, the necessary safety equipment as set forth on the label of the pesticide to be used.

AUTHORITY: Title 22 M.R.S.A., Chapter 258-A

EFFECTIVE DATE: July 6, 1979

AMENDMENT EFFECTIVE: April 1, 1985

CHAPTER 21

PESTICIDE CONTAINER DISPOSAL AND STORAGE

PREFACE: Statutes governing the Board of Pesticides Control make it illegal for "any person to dispose of, discard or store any pesticides or pesticide containers in such a manner as may cause injury to humans, vegetation, crops, livestock, wildlife, beneficial insects or pollute any water supply or waterway; 7 MRSA § 606(2)(E). The Board's statutes also require it "to regulate the return and disposal of limited and restricted use pesticide containers" by promulgating regulations to (1) establish a deposit to be collected pending return of the container, (2) require stickers to be affixed to all such containers at time of sale, (3) insure triple rinsing or equivalent of the containers, and (4) specify places where rinsed containers may be returned for refund, in addition to the place of business of the dealer; 22 MRSA § 1471(Q). These regulations shall be effective April 1, 1985.

SUMMARY: These rules set forth the regulations for the management of emptied pesticide containers for limited and restricted use pesticides. They establish deposit amounts, sticker requirements, triple rinse or equivalent procedures, and refund places and procedures. The rules are organized according to classification of the pesticide as to whether it was purchased in-state or out-of-state.

A. Limited and Restricted-Use Pesticides Purchased In-State

1. Scope. The rules in this Subchapter A apply to limited and restricted-use pesticides and their containers purchased from licensed Maine dealers. The following types of containers are exempt from these regulations but must be stored, handled and disposed of according to label directions and applicable D.E.P. regulations.
 - a. Paper, cardboard and fiberboard containers and plastic bags.
 - b. Containers of less than one-half pint volume.
 - c. Sealed containers, refillable only by the manufacturer or distributor, provided that such containers are required to be returned by the applicator to the manufacturer or distributor, that a deposit of no less than \$50 per container is charged by the manufacturer or distributor to the applicator or purchaser, and that the manufacturer or distributor establishes and carries out a monitoring system which provides for the identification and tracking of each container.
2. Deposits. Dealers shall collect deposits in cash or posted credit charges on each pesticide container at the time of sale or delivery to the purchaser or its agent, as follows:

- a. Non-refillable containers
 - (1) One-half pint to 30 gallons capacity -\$5.00 per container
 - (2) 30 gallons capacity and over - \$10.00 per container
 - b. Refillable containers. At their option, dealers may collect deposits greater than those required for non-refillable containers.
3. Stickers. Prior to or at the time of delivery of the pesticide to the purchaser or its agent, stickers obtained from the Board of Pesticides Control shall be affixed by dealers to pesticide containers.
- a. Dealers shall obtain stickers by making a request, on forms provided for that purpose, to the Board at least two weeks prior to anticipated need. Completed forms shall be forwarded to the Board of Pesticides Control, Deering Building, AMHI Complex, Augusta, Maine 04333. Arrangements for emergency pick up of stickers may be made by contacting the Board at 207/289-2731. Dealers will be billed and shall pay for the costs of printing and shipping stickers, as assessed by the Board.
 - b. Dealers shall affix stickers prominently and securely to containers in a manner that will not obscure or interfere with any trademark or label instructions. Such stickers shall in no event be deemed a part of the label. If an unopened case of containers is to be sold and delivered to the purchaser or its agent, the dealer may securely attach or fasten a sufficient number of stickers (one for each container) to the exterior of the unopened case prior to delivery. In such event, the purchaser or his agent shall either affix stickers to containers immediately upon opening the case, or the containers shall at all times be kept with the case on which the stickers remain affixed, except during actual use of the containers, and shall be returned to the dealer or his agent as a unit for return of deposit and disposal.
 - c. Stickers, as supplied by the Board and completed by the dealer at the time of sale or delivery to the purchaser or his agent, shall identify the dealer and the purchaser and shall contain such other information as the Board shall require. Dealers shall keep a record of sticker numbers and corresponding purchasers for each container sold.
 - d. It shall be unlawful to remove, deface, or otherwise render illegible a sticker affixed to a container except at the time of recycling or disposal in accordance with these regulations.

4. Records. Dealers shall maintain records of all restricted or limited use pesticide sales subject to these regulations for a period of two calendar years. Information required includes the following:
 - a. the name and address of the purchaser (and agent, if any), and date of delivery
 - b. the registered name of the pesticide and the number and size of each container
 - c. the serial number of each sticker affixed to a container
 - d. the amount of the deposit paid or posted to credit
5. Triple rinse or equivalent. Pesticide containers shall be triple rinsed immediately by the applicator or someone under his direct supervision, or cleaned by another authorized method or procedure equivalent in residue removal effectiveness.
 - a. The standard triple rinse procedure is as follows:
 - (1) the emptied container shall be drained for at least thirty (30) seconds after steady flow of pesticide formulation has ceased and after individual drops are evident. Any pesticide formulation drained shall be added to the spray tank mix and shall be applied in accordance with label instructions.
 - (2) a solvent, usually water, specified by the manufacturer and capable of removing the pesticide residue shall be added to the drained container in an amount equal to ten percent (10%) of its capacity. The container then shall be shaken, agitated, or rolled vigorously in such fashion as to dislodge residues from the top, bottom and sides. The liquid residues (rinsate) shall be added as make-up to the spray tank mix, and the container shall be allowed to drain for at least thirty (30) seconds after steady flow has ceased and after individual drops are evident.
 - (3) the above procedure shall be performed two more times, each time allowing the container to drain at least thirty (30) seconds and adding all rinsate to the spray tank mix, to be applied in accordance with label instructions.
 - b. In cases where undiluted formulations are used and rinsate cannot be added to the spray tank, the residue must be disposed of in accordance with label instructions.

- c. Methods of rinsing or cleaning containers, other than the standard triple rinsing procedure described above, may be used provided they are shown to remove equivalent amounts of pesticide residues which can be disposed of in an environmentally safe manner. Any person proposing to use an equivalent method that has not been previously authorized by the Board shall first obtain the Board's approval by providing data and information to document the cleaning effectiveness of the method and the environmental safety of residue disposal.
 - d. In the case of containers with removable inner liners that prevent contact between the pesticide and the container, removal of the liner shall be considered the equivalent of triple rinsing. The removed liners must be handled and disposed of according to the label and D.E.P. regulations. Liners removed from pesticides containers containing pesticides listed as hazardous waste by the D.E.P. are also considered hazardous waste unless the liners are triple rinsed with an applicable solvent or other method approved as equivalent by the D.E.P.
 - e. Following the rinsing, cleaning or liner removal procedure, plastic or metal containers not destined for return to manufacturers or shipment to reconditioners shall be punctured prior to disposal to insure they are empty and to prevent reuse. Glass containers are exempt from this puncture requirement.
6. Affidavits. The Board shall provide blank affidavit forms which purchasers or their agents must accurately complete and provide to the dealer or his representative prior to disposal and a refund of the deposit. No deposit shall be returned unless this requirement is satisfied.
- a. The following information must be recorded on the affidavit form:
 - (1) the name and address of the purchaser, and agent if any
 - (2) the registered name of the pesticide and the number and size of each container
 - (3) the serial number of each sticker affixed to a container
 - b. The following must be completed by the purchaser or his agent on the affidavit at the time the empty and properly rinsed containers are returned to an authorized collection, recycling or disposal place:

- (1) The following certification to be signed by the purchaser or his agent and the person performing container rinsing "This is to certify under oath that the container(s) with the sticker number(s) listed herein has(have) been properly rinsed according to regulations adopted by the Board of Pesticides Control."
- (2) The location and date containers were returned.
- c. The information contained on the affidavit shall be true and correct. It shall be a violation hereof to sign or submit a false affidavit.
- d. The dealer shall retain a copy of the completed affidavit for two years following return or may forward the same to the Board.

7. Return and refund.

- a. Containers bearing the Board's stickers that have been properly rinsed according the Board's regulations, and that are accompanied by completed affidavits to that effect, shall be returned for refund of deposit as follows:
 - (1) to an authorized collection, disposal or recycling facility specified by the dealer, provided that arrangement for the use of such facility have been made by the dealer, or
 - (2) otherwise, to the place of business of the dealer who sold the pesticide.
- b. Upon return of the containers and receipt of the affidavit as provided above, cash deposits shall be refunded by the dealer in cash, and deposits that were posted to credit accounts shall be credited to reduce such accounts, except that if such accounts have been paid in full prior to return, then refunds shall be in cash.

B. Limited and Restricted Use Pesticide Purchased Out-of-State

- 1. Scope. The rules in this Subchapter B apply to limited and restricted use pesticides and their containers purchased out-of-state and brought into the State other than for resale, and which are held for use or used within the State. The following types of containers are exempt from these regulations but must be stored, handled and disposed of according to label directions and applicable D.E.P. regulations.

- a. Paper, cardboard and fiberboard containers and plastic bags.
 - b. Containers of less than one-half pint volume.
 - c. Sealed containers, refillable only by the manufacturer or distributor, provided that such containers are required to be returned by the applicator to the manufacturer or distributor, that a deposit of no less than \$50 per container is charged by the manufacturer or distributor to the applicator or purchaser, and that the manufacturer or distributor establishes and carries out a monitoring system which provides for the identification and tracking of each container.
2. Deposits. Any person who purchases or otherwise acquires pesticides in containers within the scope of the regulations in this Subchapter B shall pay deposits on the containers to the Board of Pesticides Control, as follows:
 - a. All containers
 - (1) One-half pint to 30 gallons capacity - \$5.00
 - (2) 30 gallons capacity and over - \$10.00
 - b. Deposits shall be in cash, check, or money order and must be paid at the time stickers are requested under paragraph 3.
3. Stickers. At the time that pesticides are received for use in this State, stickers must be obtained from the Board and shall be affixed to such containers by the purchaser or his agent, as follows:
 - a. Stickers shall be obtained by making a request, on forms provided for that purpose, to the Board at least two weeks prior to anticipated need. Completed forms shall be forwarded to the Board of Pesticides Control, Deering Building, AMHI Complex, Augusta, Maine 04333. Arrangements for emergency pick up of stickers may be made by contacting the Board at 207/289-2731. All requests must be accompanied by cash, check, or money order in an amount to cover the deposits due and for the costs of printing and shipping the stickers, as assessed by the Board.
 - b. Stickers shall be affixed prominently and securely to containers in a manner that will not obscure or interfere with any trademark or label instruction. Such stickers shall in no event be deemed part of the label.
 - c. It shall be unlawful to remove, deface, or otherwise render illegible a sticker except at the time of recycling or disposal of the container in

accordance with these regulations.

4. Affidavits. The Board will provide blank affidavit forms to those seeking stickers for containers and the purchaser or his agent must complete such a form prior to returning containers for disposal.
 - a. The following information must be completed on the affidavit form:
 - (1) the name and address of the purchaser, and agent if any
 - (2) the registered name of the pesticide and the number and size of each container
 - (3) the serial number of each sticker affixed to a container
 - b. The following must be completed by the purchaser or his agent on the affidavit at the time the empty and properly rinsed containers are returned to an authorized collection, recycling or disposal place:
 - (1) the following certification to be signed by the purchaser or his agent and the person performing container rinsing "This is to certify under oath that the container(s) with the sticker number(s) listed herein has(have) been properly rinsed according to regulations adopted by the Board of Pesticides Control."
 - (2) The location and date containers were returned.
 - c. The information contained on the affidavit shall be true and correct. It shall be illegal to sign or submit a false affidavit.
 - d. The completed and signed affidavit shall be submitted to the Board at the time a request is made for refund of the deposit.
5. Triple rinse or equivalent. Pesticide containers shall be triple rinsed immediately by the applicator or someone under his direct supervision, or cleaned by another authorized method or procedure equivalent in residue removal effectiveness.
 - a. The standard triple rinse procedure is set forth in Subchapter A, Section 5 a and b of this Chapter.
 - b. Methods of rinsing or cleaning containers, other than the standard triple rinsing procedure described above, may be used provided they are shown to remove equivalent amounts of pesticide residues which can be disposed

of in an environmentally sound manner. Any person proposing to use an equivalent method that has not been previously authorized by the Board shall first obtain the Board's approval by providing data and information to document the cleaning effectiveness of the method and the environmental safety of residue disposal.

- c. In the case of containers with removable inner liners that prevent contact between the pesticide and the container, removal of the liner shall be considered the equivalent of triple rinsing. All removed liners must be handled and disposed of according to the label and D.E.P. regulations. Liners removed from pesticides containers containing pesticides listed as hazardous waste by the D.E.P. are also considered hazardous waste unless the liners are triple rinsed with an applicable solvent or other method approved as equivalent by the D.E.P.
- d. Following the rinsing, cleaning, or liner removal procedure, plastic or metal containers not designated for return to manufacturers or shipment to reconditioners shall be punctured prior to disposal to insure they are empty and to prevent reuse. Glass containers are exempt from this puncture requirement.

6. Return for Refund.

- a. Containers bearing the Board's stickers that have been properly rinsed and punctured according to the Board's regulations shall be returned to an authorized recycling, collection or disposal facility, as follows:
 - (1) completed and signed affidavits must accompany all containers returned
 - (2) the place and date of return shall be confirmed by the operator of the recycling, collection or disposal facility.
- b. Requests for refund of deposits shall be made, on forms provided for that purpose, to the Board of Pesticides Control, Deering Building, AMHI Complex, Augusta, Maine 04333. All requests must be accompanied by properly completed and signed affidavits that account for stickers issued by the Board.

7. Out-of-State Dealer Option. Any out-of-state dealer may elect to act as if it were an in-state dealer under Subchapter A hereof. In that case such dealer shall apply for stickers from the Board and shall otherwise comply with the requirements of Subchapter A. Purchasers from such dealers and other handlers shall comply with Subchapter A. The provisions of this Subchapter B shall not apply in such case.

- C. **Held-over Containers.** After April 1, 1985, it shall be unlawful for any person to possess a restricted or limited use pesticide container without a sticker issued by the Board and affixed to the container, except as specifically exempted under Subchapter A and B hereof and except for containers held by dealers for sale. Stickers for pesticide containers subject to this regulation in the possession of applicators or users on April 1, 1985 shall be obtained by making a request, on forms provided for that purpose, to the Board of Pesticides Control, Deering Building, AMHI Complex, Augusta, Maine 04333.
1. The request must contain the following information:
 - a. The registered name of the pesticide, and the number of the containers.
 - b. The following certification "This is to certify that the pesticide containers described herein were in my possession on April 1, 1985," signed by the person requesting stickers.
 2. Stickers issued by the Board under this Subchapter C shall be supplied without fee.
 3. Stickers provided by the Board must be affixed to the containers described in the request as described in Subchapter B. Such stickers shall not be affixed to any other containers.

AUTHORITY: 22 M.R.S.A. § 1471-Q

EFFECTIVE DATE: April 1, 1985

AMENDMENT EFFECTIVE: May 18, 1986

June 27, 1988

CHAPTER 22

STANDARDS FOR OUTDOOR APPLICATION OF PESTICIDES

BY POWERED EQUIPMENT IN ORDER TO MINIMIZE

OFF-TARGET DEPOSITION

SUMMARY: These regulations establish procedures and standards for the outdoor application of pesticides by powered equipment in order to minimize spray drift and other unconsented exposure to pesticides. The primary purpose of these regulations is to implement the legislative mandate of the Board, as expressed by 7 M.R.S.A. § 606(2)(G), to design rules which "minimize pesticide drift to the maximum extent practicable under currently available technology."

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COMPANION REGULATIONS TO CHAPTER 22 1-2

SECTION 1. DEFINITIONS.

For purposes of this chapter, the following terms shall have the following meanings unless the context otherwise requires:

- A. Non-powered equipment means pesticide spray equipment which pumps and disperses pesticides without utilization of an electric, gasoline, wind-driven or other motorized power source. By way of example, non-powered equipment includes manual pump spray equipment and self-contained aerosol spray cans or bottles but does not include equipment which employs a motor, except one powered only by hand.
- B. Off-target direct discharge of pesticides means the direct application of pesticides onto property beyond the boundaries of the target area intended to be treated. Presence of off-target direct discharge of pesticides may be determined by any evidence, through observation, residue samples or other techniques, that an off-target area has received substantially the same dose of pesticide as a target area.
- C. Off-target drift of pesticides means the drifting of pesticides by air currents or diffusion with resulting deposition of pesticides onto property beyond the boundaries of the target area intended to be treated. The detection of pesticides beyond the boundaries of the target area intended to be treated shall be presumed to be as a result of off-target drift unless there is evidence of off-target direct discharge of pesticides.
- D. Sensitive area means any of the following, except where the area involved is the intended target of the pesticide application:
 - I. Residential buildings, together with any land which is part of the same property and is within 100 feet of such buildings;
 - II. School buildings, together with any land which is part of the same property and is within 100 feet of such buildings, and also together with any playgrounds, athletic fields or other such facilities designed for use by persons in the vicinity of school buildings;
 - III. Commercial or other buildings where human use occurs (including without limitation places of business, places of worship, and other commercial and institutional buildings), together with any land which is part of the same property and is within 100 feet of such buildings;
 - IV. Developed recreational areas open to public accommodation, including developed public or commercial campgrounds, developed

picnic areas, marked roadside rest areas, marked publicly-owned or maintained hiking trails, developed park and recreation facilities, playgrounds, playing fields and other areas developed for organized sports or recreation;

- V. Apiaries the location of which is registered with the Department of Agriculture, Food and Rural Resources pursuant to 7 M.R.S.A. § 2701;
- VI. Critical areas designated by the Board pursuant to 22 M.R.S.A. § 1471-M(2);
- VII. Public wells, drinking water springs used by the public, and public water supply intake points, provided the location of the same is known or should reasonably be known to the pesticide applicator;
- VIII. Private sources of drinking water, where the owner or legal user thereof has given prior notice of the location of such source to the landowner or lessee of the area which will be subject to a pesticide application;
- IX. Water bodies, including streams, brooks, rivers, ponds, lakes, estuaries and marine waters, provided that any such water body contains water at the time of the pesticide application and is known to the spray applicator or is reasonably detectable from visual observation, reasonably available maps or reasonable inquiry. This term shall not include: (a) in the case of forest aerial spray programs, streams and brooks that are neither shown on reasonably available maps nor visible from an aircraft operating at 1000 feet in elevation above ground level; and (b) waters that are confined and retained completely upon the property of the person conducting or contracting for spray services, and that do not drain into or connect with any other water body;
- X. Freshwater and coastal wetlands, as described in 38 M.R.S.A. § 407-A and 472(2);
- XI. Cleared areas where livestock are contained or pastured, cultivated land, cropland or gardens.

SECTION 2. EXEMPTIONS.

The regulations established by this chapter shall not apply to pesticide applications in any of the following categories:

- A. Applications of pesticides confined entirely to the interior of a building;
- B. Applications of pesticides by non-powered equipment;
- C. Applications of pesticides exclusively in granular or pelletized form;
- D. Applications of pesticides injected underground or otherwise injected directly into the target medium. Such applications must involve no spraying of pesticides whatsoever.

SECTION 3. STANDARDS OF CONDUCT FOR PESTICIDE APPLICATIONS.

All pesticide applications subject to these regulations shall be undertaken in compliance with the following standards of conduct:

A. General Requirements.

- I. Prior to and during pesticide spray activities, applicators shall determine and monitor the condition of the equipment to be used, weather conditions, the boundaries of the area to be treated, surrounding properties, including any sensitive areas in the vicinity, and other pertinent factors. These monitoring efforts must be sufficient to assure that spray activities are conducted in accordance with these regulations, pesticide label requirements and otherwise in a manner which complies with law.
- II. In any event, spray activities shall immediately cease if there is significant risk that these regulations or label requirements are not being or cannot be satisfied.

B. Equipment.

- I. Pesticide spray equipment shall be used in accordance with its manufacturer's recommendations and instructions, and shall be in sound mechanical condition, free of leaks and other defects or

malfunctions which might cause pesticides to be deposited off-target.

- II. Pesticide spray equipment shall be properly calibrated. Calibration shall occur with sufficient frequency, depending on extent and type of use of equipment and pesticides employed, so that equipment remains reasonably close to calibration specifications when in use. Applicators shall maintain work sheets to show types of nozzles, pressure, boom height and speed of equipment at time of calibration and a brief description of the calibration method.
- III. Pesticide application equipment shall have properly functioning shut-off valves or other mechanisms which enable the operator to prevent direct discharge and minimize drift to non-target areas. Spray equipment designed to draw water must also have a properly functioning antisiphoning device.

C. Weather Conditions.

- I. Spray applications shall not be undertaken when weather conditions favor pesticide drift onto sensitive areas or otherwise prevent proper deposition of pesticides on target.
- II. Spray applicators shall be familiar with all weather conditions and related factors which affect settling of pesticides on to or off target. Such factors include temperature, inversion, wind speed and direction, potential for drift and volatilization, equipment functioning and pertinent label instructions.
- III. Pesticide application must cease immediately when visual observation reveals or should reveal that spray is not being deposited on target.
- IV. Without limitation of the other requirements herein, under no circumstances shall pesticide application occur when wind speed in the area is in excess of 15 m.p.h.

D. Identification of Sensitive Areas.

- I. Prior to spraying a pesticide, the applicator must become familiar with the area to be sprayed and must identify and record any sensitive area located within 500 feet of the target area. Applicators shall be prepared to demonstrate by production of a map, sketch, field notes, log or other documentation that this

requirement has been met. This requirement shall not apply to residential lawn and ornamental tree and plant applications.

- II. Prior to spraying by aerial application, the field or other area to be sprayed shall be clearly identified by means of ground markings or other physical identification characteristics clearly visible from the air.

E. Presence of Humans, Animals.

Pesticide applications shall be undertaken in a manner which minimizes exposure to humans, livestock and domestic animals.

The applicator shall cease spray activities at once upon finding evidence showing the likely presence of unprotected persons in the target area or in such proximity as to result in unconsented exposure to pesticides.

- F. Records. All applicators shall maintain or cause to be maintained written records containing the following information:

- I. Date and time of application;
- II. Identification of spray application site;
- III. Pest or target organism;
- IV. Pesticide, type of equipment, and rate of application;
- V. Weather conditions, including approximate wind speed and direction, in the vicinity and at the time of application; and
- VI. Name of applicator.

Such records, together with the information required under subsection DI of this section, shall be retained by or on behalf of the applicator for a period of two years following date of application, and shall be made available to representatives of the Board on request.

- G. Posting Requirements for Pesticide Applications for Lawn and Ornamental Tree Care.

- I. Where a pesticide application for lawn or ornamental tree or plant care will take place in an area of likely human use, the area shall be posted in a manner and at locations designed to reasonably

assure that persons entering such area will see the notice. Such notice shall be posted before spray activities commence and shall remain in place at least two days following the completion of spray activities. The notice shall be sufficient if it contains information which alerts persons to the fact that pesticide spraying has occurred or is to occur. The sign shall be sufficient if it meets the following minimum specifications:

- (i) The sign must be at least five (5) inches wide and four (4) inches high;
- (ii) The sign must be made of sturdy, weather resistant material that will last at least forty-eight (48) hours when placed outdoors;
- (iii) The sign must light colored (white, beige, yellow or pink) with dark, bold letters (black, blue or green);
- (iv) The sign must bear the word CAUTION in 72 point type and the words PESTICIDE APPLICATION in 30 point type or larger;
- (v) The sign must also bear the Board designated symbol;
- (vi) The sign must also bear the name of the company making the pesticide application and its telephone number;
- (vii) When posted, the bottom of the sign must be at least one (1) foot above the surface of the turf.

- II. An area of likely human use includes any area within 150 feet of a residential, commercial or institutional building which is regularly used by person(s) other than the person(s) authorizing or conducting the pesticide application.

H. Other Requirements.

These regulations are intended to be minimum standards. Weather and topographical conditions, proximity to areas of particular sensitivity and other factors may require the applicator to take special precautions, beyond those set forth in these regulations, in order to avoid adverse impacts on off-target areas and to protect public health and the environment. Moreover, these regulations are not

designed or intended, nor should they be construed, to affect rights of private citizens in civil actions arising out of the negligent use or other misapplication of pesticides.

These regulations also do not affect pesticide label instructions, which may be more restrictive in certain cases. Under federal and state law, wherever particular label instructions impose standards which are more restrictive than these regulations, such label instructions must be followed. Similarly, these regulations do not affect more restrictive regulations or guidelines applicable to particular types of pesticide applications.

SECTION 4. GENERAL STANDARDS FOR OFF-TARGET PESTICIDE DISCHARGE AND RESIDUE.

A. Prohibition of Unconsented, Off-target Direct Discharge of Pesticides.

Pesticide applications shall be undertaken in a manner which does not result in off-target direct discharge of pesticides, unless prior authorization and consent is obtained from the owner or lessee of the land onto which such discharge may occur.

B. Standards for Unconsented, Off-Target Drift.

I. General Standard. Pesticide applications shall be undertaken in a manner which minimizes pesticide drift to the maximum extent practicable, having due regard for prevailing weather conditions, toxicity and propensity to drift of the pesticide, presence of sensitive areas in the vicinity, type of application equipment and other pertinent factors.

II. Prima Facie Evidence of Violation. Without limiting the generality of subsection I above, the presence of pesticide drift residues in excess of any of the following levels shall constitute prima facie evidence that the applicator did not take reasonable precautions to minimize pesticide drift to the maximum extent practicable:

- (i) Pesticide residues in any off-target sensitive area in the vicinity of an application site which exceed 20% of the residues found, or which with proper application technique would have occurred, within the target area. For purposes of this standard, residue levels, within both a target area and an

off-target sensitive area, may be determined by evaluation of one or more ground, foliage or other samples, or by extrapolation or other appropriate techniques.

- (ii) Pesticide residues on any off-target sensitive area in the vicinity of an application site which result in damage to crops, vegetation or other species within the sensitive area.
- (iii) Pesticide residues on any off-target organic farm or garden in the vicinity of an application site which causes the organic products thereof to fail to meet the tolerance for organic agricultural commodities as set forth in 7 M.R.S.A. § 553(2)(B). This standard shall apply only where, prior to the time the pesticide application occurs, the owner or operator of the organic farm or garden notifies the owner or lessee of the land to be sprayed, with such notice identifying the farm or garden as organic.
- (iv) The residue standards in this subsection II for off-target drift do not apply where the owner or lessee of the off-target area receiving pesticide drift has given authorization and consent as prescribed under subsection C of this section.

III. Standards for Particular Pesticides. The Board may by rule provide more restrictive residue standards than those prescribed herein for particular pesticides, where pesticide toxicity, propensity to drift or other circumstances warrant.

C. Consent; How Given.

- I. Authorization and consent by the owner or lessee of land receiving a pesticide discharge or drift may be given in any manner, provided that the consent is reasonably informed and is given prior to the onset of the spray activity in question. The burden of proof shall be upon the applicator to demonstrate that requisite authorization and consent has been given. For this reason, applicators are encouraged to obtain such consent in writing and to maintain records thereof.

- II. Except with the prior written approval of the Board, no authorization or consent may be given with regard to off-target direct discharge or off-target drift of pesticides upon any of the following sensitive areas: bodies of water, as described in section 1D, IX, and critical areas as described in Section 1D VI hereof.

SECTION 5. DRIFT MANAGEMENT PLAN.

A. **Purpose.**

Landowners, lessees and/or spray applicators may develop a drift management plan to cover applications undertaken by or on behalf of them. The purpose of such a plan shall be to minimize the occurrence and adverse effects of pesticide drift. Where a drift management plan is in effect and complied with, management flexibility may be enhanced.

B. **Contents**

A drift management plan must contain measures designed to meaningfully reduce and minimize the incidence and adverse effects of off-target drift of pesticides, with a particular view to protecting sensitive areas. Such measures shall consider and include at least some of the following elements:

- I. The establishment of no-spray buffer zones between spray blocks and sensitive areas to minimize drift;
- II. Spraying only when maximum wind speed and/or direction are as prescribed by the plan, with that prescription being less than the maximum allowable wind speed established under section 3C IV;
- III. The use of coarse spray droplets created by a combination of special nozzles, pressures and articulating agents;
- IV. The use of specialized equipment designed to minimize spray drift;
- V. The use of wind shields or breaks to deflect or contain spray drift away from sensitive areas;
- VI. The use of closest possible points of spray release to the target in order to minimize drift;
- VII. The use of lowest effective rates of application of pesticides;

- VIII. The use of integrated pest management techniques, including planting of pest resistant varieties, removal of pest host plants, long-range planning to rotate crops and monitor fields, and other measures designed to minimize the use of pesticides over the planting season and/or over several planting seasons;
- IX. Posting of the area to be sprayed or other forms of effective public notification, provided that this measure must be accompanied by other measures designed to reduce drift;
- X. Other specific measures stated in the plan which are effective in minimizing the incidence and adverse effects of pesticide drift.

C. Procedure.

Any person wishing to operate under a drift management plan must prepare the plan in writing, stating with specificity the measures which will be used, and how they will be used, in reducing the incidence of drift and protection of sensitive areas. The plan shall also include a map, aerial photograph or sketch of the area(s) to be sprayed, the crops to be treated, the pesticide(s) and equipment which may be used, the target pest(s), and the monitoring techniques and thresholds which will be used in making a decision to spray a given area. The plan shall be dated and signed by the person(s) responsible for carrying out its provisions, who shall also provide an address and telephone number by which (s)he can be reached.

D. Filing; Review by Board.

The drift management plan need not be filed with the Board but must be retained by the person having responsibility for pesticide application. Notification to the Board of the existence of the plan shall be submitted on forms to be prepared by the Board. The Board may from time to time review any plan for adequacy in providing for minimum drift and protection of sensitive areas. If the Board requests a copy of the complete plan, it shall be promptly submitted. If the Board at any time determines that a plan is not adequate, or is not sufficiently detailed to allow for an evaluation of its adequacy, it shall notify the person responsible for the plan and provide an opportunity for that person to amend the plan in order to make it adequate. The Board may notify that person of amendments or conditions which would make the plan acceptable. Any plan determined by the Board to be inadequate shall be declared invalid by the Board.

E. Period of Effectiveness.

A drift management plan shall be effective for a period of two years, after which it must be updated by the person responsible for its preparation. The Board shall be notified in writing of the updated plan.

F. Legal Effect of Plan.

Operating under a drift management plan does not allow an applicator to avoid compliance with the requirements of Section 3 and 4A of these regulations. Departure from the standards of Sections 3 and 4A requires a variance permit under Section 7.

G. Enforcement.

In the event of an incident involving alleged pesticide drift or other misapplication where a drift management plan was in effect, the Board shall examine the adequacy of the plan and may declare the same inadequate or recommend further amendments or conditions. The Board shall take into consideration the existence of and good faith compliance with a plan in determining whether further enforcement action by the Board is necessary.

SECTION 6. PUBLIC NOTIFICATION.

A. Purpose.

The purpose of the following notification requirements is to enable concerned neighbors an opportunity to obtain basic information regarding pesticide spraying activities in their vicinity, and to accomplish this objective in the least obtrusive and least burdensome manner possible.

B. Requests for Notification; How Made.

The owner, lessee or other legal occupant of a sensitive area may make a request to be notified of the pendency of pesticide application(s) which may occur within 500 feet of that sensitive area. The request may be made in any fashion, so long as it is effective in informing the person receiving the request of the name, address, telephone number, and interest in receiving notification of the person making the request. The request for notification should be made to the person responsible for management of the land on which a pesticide application will take place. If the person making the request for notification is uncertain as to the

identity of the person to whom the request should be made, he may make the request for notification to the person who owns the land involved, as such ownership is ascertainable from the tax records of the municipality. That landowner shall then be responsible for assuring compliance with the provisions of this section.

C. Procedure of Notification.

Once a request for notification has been made as provided in subsection B above, the person receiving the request shall cause notification to be given as follows:

- I. General notification of intent to apply pesticides shall be given to the person making the request for notification. Such general notification may be given in any fashion, provided that it is effective in informing the person receiving the notice of the following: the approximate date(s) when pesticide(s) may be applied; the pesticide(s) which may be applied; in general terms, the manner of application; and the name, address and telephone number of a person responsible for the pesticide application from whom additional information may be obtained. Where feasible, such general notification shall be given within one week after the request for notification is received and at least one day before any pesticide application is to occur. Such notification may cover pesticide applications which are planned over a period of up to one growing season.
- II. If, following receipt of the general notification as provided by paragraph I above, the person seeking notification believes there is a need for additional or updated information regarding impending spray activities, he may make a further request for additional information from the person identified in the general notification. This request for additional information must specify the type of information needed, including, for example, more specific information regarding the date or dates on which pesticides will be applied when known. The person responsible for the notification shall make reasonable efforts to comply with such request for additional information.
- III. If any person is dissatisfied with the efforts made by any other person at complying with these notification provisions, a complaint may be filed with the Board. The Board shall then make efforts to attempt to reach a reasonable and fair resolution between the parties.

SECTION 7. VARIANCES FROM STANDARDS**A. Variance Permit Application.**

An applicator may vary from any of the standards imposed under this chapter by obtaining a permit to do so from the Board. Permit applications shall be made on such forms as the Board provides and shall include at least the following information:

- I. The name, address, and telephone number of the applicant;
- II. The area(s) where pesticides will be applied;
- III. The type(s) of pesticides to be applied;
- IV. The purpose for which the pesticide application(s) will be made;
- V. The approximate date(s) of anticipated spray activities;
- VI. The type(s) of spray equipment to be employed;
- VII. The particular standards from which the applicant seeks a variance;
- VIII. The particular reasons why the applicant seeks a variance from such standards, including a detailed description of the techniques to be employed to assure a reasonably equivalent degree of protection and of the monitoring efforts to be made to assure such protection;
- IX. The names and addresses of all owners or lessees of land within 500 feet of the proposed spray activity, and evidence that such persons have been notified of the application. The Board may waive this requirement where compliance would be unduly burdensome and the applicant attempts to notify affected persons in the community by another means which the Board finds reasonable.

B. Board Review; Legal Effect of Permit.

Within 60 days after a complete application is submitted, the Board shall issue a permit if it finds that the applicant will achieve a substantially equivalent degree of protection as adherence to the requirements of this chapter would provide and will conduct his activities in a manner which protects human health and the

environment. Such permit shall authorize a variance only from those particular standards for which variance is expressly requested in the application and is expressly granted in the permit. The Board may place conditions on any such permit, and the applicant shall comply with such conditions. Except as conditioned in the permit, the applicant shall undertake spray activities in accordance with all of the procedures described in his application and all other applicable legal standards. Permits issued by the Board under this section shall not be transferable or assignable except with further written approval of the Board and shall be valid only for the period specified in the permit.

STATUTORY AUTHORITY: 7 M.R.S.A. § 606(2)(G):
22 M.R.S.A. § 1471-M(2)(D)

End of Chapter 22

Effective Date: January 1, 1988

**COMPANION REGULATIONS
TO CHAPTER 22**

**AMENDMENTS TO CHAPTER 20 "SPECIAL PROVISIONS" OF THE BOARD'S
REGULATIONS**

SUMMARY: The Board has broad legal authority to review the efficacy and environmental and health impacts of pesticides upon registration or re-registration. The following amendment to the Board's regulations calls explicit attention to the fact that the Board may consider the environmental consequences not only of direct discharge of pesticides to target areas but of the effects of drift and other possible off-target deposition. This new section also makes explicit that the applicant for registration may be asked to provide residue and other data so that the Board may make an informed judgment on these issues. While it is not anticipated that the Board will regularly request residue data under this new section, it is provided as a clear recognition of the need for an expanded data base as the Board proceeds with its effort to minimize the impacts of pesticide drift and off-target deposition.

Amend Chapter 20, Section 1, of the Board's regulations by adding a new paragraph C, as follows:

- C. In conducting review of registration or re-registration pursuant to 7 M.R.S.A. § 607-A, the Board may consider the potential for environmental damage by the pesticide through direct application on or off-target or by reason of drift. If the Board finds that the use of the pesticide is anticipated to result in significant adverse impacts on the environment, whether on or off-target, which cannot be avoided or adequately mitigated, registration or re-registration will not be granted unless the Board finds that anticipated benefits of registration clearly outweigh the risks. In any case where the Board may request data in connection with registration or re-registration of any pesticide, such data may include that concerning pesticide residues, propensity for drift and testing therefor. Such data, if requested, shall provide information regarding residues and residue effects on plant tissues, soil and water and other potential deposition sites, and shall take into consideration differences in plants, soils, climatic conditions at the time of application and application techniques.

STATUTORY AUTHORITY: 7 M.R.S.A. § 607(5); 607-A; 610

AMENDMENT TO CHAPTERS 31, 32, 33, 34, 35 AND 36 "CERTIFICATION AND LICENSING PROVISIONS" OF THE BOARD'S REGULATIONS

SUMMARY: These additions to the existing competency standards for various types of applicators make explicit the Board's interest in increasing applicator awareness of methods and techniques to control pesticide drift. These amendments should be accompanied by appropriate training information and examination questions.

Amend Chapter 31, Section 3(A), Chapter 31, Section 4(A), Chapter 32, Section 2(A), Chapter 33, Section 3(A), Chapter 34, Section 2(A), Chapter 35, Section 2(A) and Chapter 36, Section 2(A), by adding thereto the following:

Also required shall be knowledge of current methodology and technology for the control of pesticide drift to non-target areas, the proper meteorological conditions for the application of pesticides, the effect of pesticides on plants, animals or humans in the area, including by reason of direct application or off-target drift.

STATUTORY AUTHORITY: 22 M.R.S.A. § § 1471-M; 1471-D(4)

EFFECTIVE DATE: January 1, 1988

Chapter 30

CERTIFICATION AND LICENSING PROVISIONS¹ (See Footnote)

¹All sections pertaining to private applicators and pesticide dealers are repealed effective January 1, 1983 and appear as revised in Chapter 32 and 34 respectively. Chapter 30 repealed in its entirety effective January 1, 1984 with sections pertaining to commercial applicators and government pesticide supervisors in Chapter 31 and 33 respectively.

establishing policies relating to the operating practices of others applying pesticides within the company or agency. Such practices may include equipment maintenance and calibration, employee training, safety and hygiene, pesticide and container disposal, accident mitigation and ensuring that applications are conducted in compliance with all state and federal laws and regulations.

D. Commercial Applicator/Operator. A commercial applicator/operator is a commercial applicator:

- I) who applies or directs the application of a pesticide according to the instructions of the master when a master is required under subsection E below; or
- II) who applies or directs the application of a pesticide and performs the function of the master applicator when a separate master is not required under subsection E below.

E. Company/Agency Licensing Requirements. Unless exempted hereunder, each company, agency, organization or self-employed individual ("employing entity") required to have personnel licensed commercially under state pesticide law shall have at least one master applicator. This master applicator must have day to day contact with persons applying pesticides within such employing entity and have the ability to be on site to assist such persons within a reasonable period of time (1 to 2 hours). Employing entities applying restricted use antifouling paints and those applying general use pesticides with non-powered equipment in the following situations are exempt from master licensing requirements:

- I) Municipalities making applications to municipal property.
- II) Persons applying herbicides to residential lawns.

F. Licensing. Licensing is the issuance by the Board of a document signifying that the applicant has been certified and has met all fee, insurance and reporting requirements.

2. Categories of Commercial Applicators

A. All commercial applicators shall be categorized according to the type of work performed as outlined below:

I. Agricultural Pest Control

- a. **Animal** - This subcategory includes commercial applicators using or supervising the use of pesticides on animals and to places on or in which animals are confined. Doctors of Veterinary Medicine engaged in the business of applying pesticides for hire as pesticide applicators or in large scale use of pesticides are included in this subcategory; however, those persons applying pesticides as drugs or medication during the course of

their normal practice are not included.

b. Plant - This subcategory includes commercial applicators using or supervising the use of pesticides in the production of crops including blueberries, orchard fruit, potatoes, vegetables, forage, grain and industrial or non-food crops.

II. Forest Pest Control

a. General Forest - This subcategory includes commercial applicators using or supervising the use of pesticides in forests, forest nurseries, and forest seed producing areas, except those uses described in subsection (b) below.

b. Forest Vegetation Management - This subcategory includes commercial applicators treating forest lands with herbicides selectively, in such a way as to improve growth conditions for the species being managed.

III. Ornamental and Turf Pest Control

a. Outdoor Ornamentals - This subcategory includes commercial applicators using or supervising the use of pesticides to control pests in the maintenance and production of outdoor ornamental trees, shrubs and flowers.

b. Turf - This subcategory includes commercial applicators using or supervising the use of pesticides to control pests in the maintenance and production of turf, such as at turf farms, golf courses, parks, cemeteries, athletic fields and lawns.

c. Indoor Ornamentals - This subcategory includes commercial applicators using or supervising the use of pesticides to control pests in the maintenance and production of live plants in shopping malls, businesses, residences and institutions.

IV. Seed Treatment

This category includes commercial applicators using or supervising the use of pesticides on seeds.

V. Aquatic Pest Control

This category includes commercial applicators using or supervising the use of pesticides applied directly to standing or running water, excluding applicators

engaged in public health related activities included in category 8 below.

VI. Right-Of-Way Vegetation Management

- a. **Utility Rights-of-Way Vegetation Management** - This subcategory includes commercial applicators using or supervising the use of pesticides in the management of vegetation in utility rights-of-way.
- b. **Roadside Vegetation Management** - This subcategory includes commercial applicators using or supervising the use of pesticides in the management of vegetation in roadside rights-of-way.
- c. **Railroad Vegetation Management** - This subcategory includes commercial applicators using or supervising the use of pesticides in the management of vegetation on railroad rights-of-way.
- d. **Industrial/Commercial/Municipal Vegetation Management** - This subcategory includes commercial applicators using or supervising the use of pesticides in the management of vegetation in industrial, commercial, municipal or publicly owned areas including, but not limited to, industrial or commercial plants and buildings, lumber yards, airports, tank farms, storage areas, parking lots and sidewalks.

VII. Industrial, Institutional, Structural and Health Related Pest Control

- a. **General** - This subcategory includes commercial applicators using or supervising the use of pesticides in, on or around human dwellings, office buildings, institutions such as schools and hospitals stores, restaurants, industrial establishments (other than in Category 6) including factories, warehouses and other structures, vehicles, ships, aircraft and adjacent areas; and for the protection of stored, processed or manufactured products. This subcategory also includes commercial applicators using or supervising the use of pesticides to control rodents on refuse areas and to control other pests of concern to public health and safety, including but not limited to ticks, birds and mammals known to be vectors of disease.
- b. **Food Processing and Fumigation** - This subcategory includes commercial applicators using or supervising the use of pesticides in, on or around food processing plants and food or feed transportation facilities such as grain elevators and terminals and railroad cars. This subcategory also includes those commercial applicators using fumigation techniques in any type of structure or transportation device.
- c. **Cooling Water** - This subcategory includes commercial applicators using or supervising the use of pesticides to treat water in industrial

cooling towers and air conditioning systems of commercial and institutional buildings.

d. Wood Preserving - This subcategory includes commercial applicators using or supervising the use of restricted use pesticides to treat lumber, poles, railroad ties and other types of wooden structures including bridges, shops and homes.

e. Biting Fly - This subcategory includes commercial applicators and non-public health governmental officials using or supervising the use of pesticides in management and control of biting flies of public health and public nuisance importance including, but not limited to, mosquitoes, black flies, midges, and members of the horsefly family.

f. Antifouling Paints - This subcategory includes commercial applicators using or supervising the use of restricted use antifouling paints to treat vessel hulls and other marine structures to inhibit the growth of aquatic organisms.

VIII. Public Health Pest Control

a. Biting Fly Pests - This subcategory includes governmental officials using pesticides in management and control of potential disease vectors or other pests having medical and public health importance including, but not limited to, mosquitoes, black flies, midges, and members of the horsefly family.

b. Other Pests - This subcategory includes governmental officials using pesticides in programs for controlling other pests of concern to public health including, but not limited to, ticks and birds and mammal vectors of human disease.

IX. Regulatory Pest Control

This category includes governmental employees using pesticides in the control of pests regulated by the U.S. Animal and Plant Health Inspection Service or some other governmental agency.

X. Demonstration and Research Pest Control

This category includes all individuals who (1) demonstrate to the public the proper use and techniques of application of pesticides or supervise such demonstration, and/or (2) conduct field research with pesticides, and in doing so, use or supervise the use of pesticides. Individuals who conduct only

laboratory-type research are not included.

XI. Aerial Pest Control

This category includes commercial applicators, including pilots and co-pilots, applying or supervising the application of pesticides by means of any aircraft.

3. Competency Standards for Certification of Commercial Applicators

A. Applicants seeking commercial certification must establish competency in the general principles of safe pest control by demonstrating knowledge of basic subjects including, but not limited to, pesticide labelling, safety, environmental concerns, pest organisms, pesticides, equipment, application techniques and applicable law and regulations. (Core Exam).

B. Applicants seeking commercial certification must demonstrate competency in each applicable category or subcategory. (Category Exam). Competency in the applicable category or subcategory shall be established as follows:

I. Agricultural Pest Control

a. **Animals.** Applicants seeking certification in the subcategory of Animal Pest Control as described in § 2(A)(I)(a) must demonstrate knowledge of animals, their associated pests, and methods of pest control. Areas of practical knowledge shall include specific toxicity, residue potential, relative hazards of different formulations, application techniques, and hazards associated with age of animals, stress, and extent of treatment.

b. **Plant.** Applicants seeking certification in the subcategory of Plant Pest Control as described in § 2(A)(I)(b) must demonstrate practical knowledge of the crops grown and the specific pests of those crops on which he may be using pesticides. Areas of such practical knowledge shall include soil and water problems, preharvest intervals, reentry intervals, phytotoxicity, potential for environmental contamination, non-target injury, and community problems related to pesticide use in certain areas. Also required shall be a knowledge of current methodology and technology for the control of pesticide drift to non-target areas, the proper meteorological conditions for the application of pesticides, the effect of pesticides on plants, animals or humans in the area, including by reason of direct application or off-target drift.

II. Forest Pest Control

a. General. Applicants seeking certification in the subcategory of General Forest Pest control as described in § 2(A)(II)(a) must demonstrate practical knowledge of forest tree biology and associated pests. Such required knowledge shall include population dynamics of pest species, pesticide-organism interactions, integration of pesticide use with other pest control methods, environmental contamination, pesticide effects on non-target organisms, and use of specialized equipment. Also required shall be a knowledge of current methodology and technology for the control of pesticide drift to non-target areas, the proper meteorological conditions for the application of pesticides, the effect of pesticides on plants, animals or humans in the area, including by reason of direct application or off-target drift.

b. Forest Vegetation Management. Applicants seeking certification in the subcategory of Forest Vegetation Management as described in § 2(A)(II)(b) must demonstrate practical knowledge of forest types and of the rationale behind forest vegetation management. Such knowledge shall include methodologies, use of specialized equipment, rationale for selecting chemical over mechanical methods, and awareness of pesticide effects upon non-target species and general aesthetics of wooded areas. Also required shall be a knowledge of current methodology and technology for the control of pesticide drift to non-target areas, the proper meteorological conditions for the application of pesticides, the effect of pesticides on plants, animals or humans in the area, including by reason of direct application or off-target drift.

III. Ornamental and Turf Pest Control

a. Outdoor Ornamentals. Applicants seeking certification in the Outdoor Ornamental subcategory as defined in § 2(A)(III)(a) must demonstrate practical knowledge of pesticide problems associated with the production and maintenance of trees, shrubs and floral plantings. Such knowledge shall include potential phytotoxicity, undue pesticide persistence, and application methods, with particular reference to techniques used in proximity to human habitations. Also required shall be a knowledge of current methodology and technology for the control of pesticide drift to non-target areas, the proper meteorological conditions for the application of pesticides, the effect of pesticides on plants, animals

or humans in the area, including by reason of direct application or off-target drift.

b. Turf. Applicants seeking certification in the Turf subcategory as described in § 2(A)(III)(b) must demonstrate practical knowledge of pesticide problems associated with the production and maintenance of turf. Such knowledge shall include potential phytotoxicity, undue pesticide persistence, and application methods, with particular reference to techniques used in proximity to human habitations. Also required shall be a knowledge of current methodology and technology for the control of pesticide drift to non-target areas, the proper meteorological conditions for the application of pesticides, the effect of pesticides on plants, animals or humans in the area, including by reason of direct application or off-target drift.

c. Indoor Ornamentals. Applicants seeking certification in the Indoor Ornamental subcategory described in § 2(A)(III)(c) must demonstrate practical knowledge of pesticide problems associated with the production and maintenance of indoor ornamental plantings. Such knowledge shall include pest recognition, proper pesticide selection, undue pesticide persistence, and application methods with particular reference to techniques used in proximity to human presence.

IV. Seed Treatment

Applicants seeking certification in the category of Seed Treatment as described in § 2(A)(IV) must demonstrate practical knowledge of seed types and problems requiring chemical treatment. Such knowledge shall include seed coloring agents, carriers and binders which may affect germination, hazards associated with handling, sorting, and mixing in the treatment process, hazards of introduction of treated seed into food and feed channels, and proper disposal of unused treated seeds.

V. Aquatic Pest Control

Applicants seeking certification in the category of Aquatic Pest Control as described in § 2(A)(V) must demonstrate practical knowledge of proper methods of aquatic pesticide application, application to limited area, and a recognition of the adverse effects which can be caused by improper techniques, dosage rates, and formulations. Such knowledge shall include basic factors contributing to the development of nuisance aquatic plant growth such as algal blooms, understanding of various water

use situations and potential downstream effects from pesticide use, and potential effects of various aquatic pesticides on plants, fish, birds, insects and other organisms associated with the aquatic environment. Also required shall be a knowledge of current methodology and technology for the control of pesticide drift to non-target areas, the proper meteorological conditions for the application of pesticides, the effect of pesticides on plants, animals or humans in the area, including by reason of direct application or off-target drift.

VI. Right-of-Way Vegetation Management

Applicants seeking certification in the subcategories under Right-of-Way Vegetation Management as described in § 2(A)(VI) (a-d) must demonstrate practical knowledge of the impact of right-of-way pesticide use on a wide variety of environments. Such knowledge shall include an ability to recognize target organisms and circumstances specific to the subcategory, awareness of problems of runoff, root pickup, problems and aesthetic considerations associated with excessive foliage destruction and "brown-out", and an understanding of the mode of action of right-of-way herbicides, and reasons for the choice of particular chemicals for particular problems, importance of the assessment of potential impact of right-of-way spraying on adjacent public and private properties and activities, and effects of right-of-way spraying on fish and wildlife species and their habitat. Also required shall be a knowledge of current methodology and technology for the control of pesticide drift to non-target areas, the proper meteorological conditions for the application of pesticides, the effect of pesticides on plants, animals or humans in the area, including by reason of direct application or off-target drift.

VII. Industrial, Institutional, Structural and Health Related Pest

a. **General.** Applicants seeking certification in the subcategory of General Pest Control as described in § 2(A)(VII)(a) must demonstrate a practical knowledge of a wide variety of pests and methods for their control. Such knowledge shall include identification of pests and knowledge of life cycles, formulations appropriate for various indoor and outdoor uses, methods to avoid contamination of food and feed, and damage to structures and furnishings, avoidance of risk to humans, domestic animals, and non-target organisms and risks to the environment associated with structural pesticide use.

b. **Food Processing and Fumigation.** Applicants seeking certification in the subcategory of Food Processing and Fumigation as described in § 2(A)(VII)(b) must demonstrated a practical knowledge of a wide variety of pests and methods for their control. Such knowledge shall include

identification of pests and knowledge of life cycles, formulations appropriate for use in food processing plants, and transportation facilities, special types of application including ultra-low volume and fumigation, methods to avoid contamination of food and damage to structures and furnishings, and avoidance of risks to employees and customers.

c. **Cooling Water.** Applicants seeking certification in the Cooling Water subcategory described in § 2(A)(VII)(c) must demonstrate practical knowledge of cooling water organisms and their life cycles, cooling water system designs, labels and hazards of cooling water pesticides, and proper application techniques to assure adequate control while minimizing exposure to humans and the environment.

d. **Wood Preserving.** Applicants seeking certification in the Wood Preserving Subcategory described in § 2(A)(VII)(d) must demonstrate practical knowledge in wood destroying organisms and their life cycles, nonchemical control methods, pesticides appropriate for wood preservation, hazards associated with their use, proper handling of the finished product, proper disposal of waste preservatives, and proper application techniques to assure adequate control while minimizing exposure to humans, livestock and the environment.

e. **Biting Fly Pests.** Applicants seeking certification in the subcategory of Biting Fly Pest control as described in § 2(A)(VII)(e) must demonstrate a practical knowledge of the species involved, their potential roles in disease transmission, and the use of pesticides in their control. Such knowledge shall include identification of and familiarity with life cycles and habitat requirements, special environmental hazards associated with the use of pesticides in control programs, and knowledge of the importance of integrating chemical and non-chemical control methods. Also required shall be a knowledge of current methodology and technology for the control of pesticide drift to non-target areas, the proper meteorological conditions for the application of pesticides, the effect of pesticides on plants, animals or humans in the area, including by reason of direct application or off-target drift.

f. **Antifouling Paints.** Applicants seeking certification in the subcategory of Antifouling Paints as described in § 2(A)(VII)(f) must demonstrate a practical knowledge of marine fouling organisms, the mode of action of antifouling paints, their hazards to applicators and marine life, and proper application techniques to assure adequate control while minimizing exposure to humans and the environment.

VIII. Public Health Pest Control

a. **Biting Fly Pests.** Applicants seeking certification in the subcategory of Biting Fly Pest Control as described in § 2(A)(VIII)(a) must demonstrate a practical knowledge of the species involved, their potential roles in disease transmission, and the use of pesticides in their control. Such knowledge shall include identification of and familiarity with life cycles and habitat requirements, special environmental hazards associated with the use of pesticides in control programs, and knowledge of the importance of integrating chemical and non-chemical control methods. Also required shall be a knowledge of current methodology and technology for the control of pesticide drift to non-target areas, the proper meteorological conditions for the application of pesticides, the effect of pesticides on plants, animals or humans in the area, including by reason of direct application or off-target drift.

b. **Other Pests.** Applicants seeking certification in the subcategory of Other Pest Control as described in § 2(A)(VIII)(b) must demonstrate a practical knowledge of the species involved, their potential roles in disease transmission, and the use of pesticides in their control. Such knowledge shall include identification of and familiarity with life cycles and habitat requirements, special environmental hazards associated with the use of pesticides in control programs, and knowledge of the importance of integrating chemical and non-chemical control methods. Also required shall be a knowledge of current methodology and technology for the control of pesticide drift to non-target areas, the proper meteorological conditions for the application of pesticides, the effect of pesticides on plants, animals or humans in the area, including by reason of direct application or off-target drift.

IX. Regulatory Pest Control

Applicants seeking certification in the category of Regulatory Pest Control as described in § 2(A)(IX) must demonstrate practical knowledge of regulated pests and applicable laws relating to quarantine and other regulations of pests. Such knowledge shall also include environmental impact of pesticide use in eradication and suppression programs, and factors influencing introduction, spread, and population dynamics of relevant pests. Also required shall be a knowledge of current methodology and technology for the control of pesticide drift to non-target areas, the proper meteorological conditions for the application of pesticides, the effect of pesticides on plants, animals or humans in the area, including by reason of direct application or off-target drift.

X. Demonstration and Research Pest Control

Applicants seeking certification in the category of Demonstration and Research Pest Control as described in § 2(A)(X) must demonstrate practical knowledge in the broad spectrum of activities involved in advising other applicators and the public as to the safe and effective use of pesticides. Persons involved specifically in demonstration activities will be required to demonstrate knowledge of pesticide-organism interactions, the importance of integrating chemical and non-chemical control methods, and a grasp of the pests, life cycles and problems appropriate to the particular demonstration situation. Field researchers will be required to demonstrate general knowledge of pesticides and pesticide safety, as well as a familiarity with the specific standards of this section which apply to their particular areas of experimentation. All individuals certified in this category must also be certified in one or more of the previous categories or subcategories which represent at least 80% of their practice. Also required shall be a knowledge of current methodology and technology for the control of pesticide drift to non-target areas, the proper meteorological conditions for the application of pesticides, the effect of pesticides on plants, animals or humans in the area, including by reason of direct application or off-target drift.

XI. Aerial Pest Control

Applicants seeking certification in the category of Aerial Pest Control as described in § 2(A)(XI) must demonstrate at least a practical knowledge of problems which are of special significance in aerial application of pesticides, including chemical dispersal equipment, tank, pump and plumbing arrangements; nozzle selection and location; ultra-low volume systems; aircraft calibration; field flight patterns; droplet size considerations; flagging methods; and loading procedures. Applicants must also demonstrate competency in the specific category or subcategory in which applications will be made, as described in paragraphs I, II, VI and VIII herein. Also required shall be a knowledge of current methodology and technology for the control of pesticide drift to non-target areas, the proper meteorological conditions for the application of pesticides, the effect of pesticides on plants, animals or humans in the area, including by reason of direct application or off-target drift.

4. Competency Standards for Certification of Commercial Applicator/Master

A. An applicant seeking certification as a commercial applicator/master must satisfy all of the requirements for certification under Section 3 hereof and one of the education/experience prerequisites set forth below:

- I. Never licensed but worked under the supervision of a licensed commercial applicator for two years/growing seasons; or
- II. Licensed as a commercial applicator for previous one year/growing season;

or

III. Achieved a score of at least 70 in 25 credit hours of courses or received 40 hours of equivalent training, deemed appropriate by the Director, in pest identification, application techniques, crop production, agronomy, entomology, plant pathology or other courses at a post secondary school or institution of education.

B. Any persons unable to meet the preceding requirements may request an appearance before the Board to describe their need for a master license and further explain how they have acquired knowledge of the pest and pesticide related subjects specified in Section 3 of these regulations. The Board shall not issue a master license under this Paragraph B unless evidence is presented which demonstrates to the Board's satisfaction that the applicant possesses a level of knowledge and ability which is substantially equivalent, though not technically identical, to that which would otherwise be required for a master's license under these regulations. The Board may impose conditions on any such license in order to assure that the licensee will protect public health and the environment in carrying out his responsibilities. The applicant shall be legally required to comply with any conditions so imposed.

C. Applicants who work in the wood manufacturing industry will be exempt from the education/experience requirements in Section 4 (A)(I-III) for the period 1986 through 1988.

D. Persons who are for the first time required to be licensed as commercial applicators as a result of the enactment of P.L. 1987, c. 243 (which provides statutory amendments to the Board's licensing definitions) are exempt from the education/experience requirements of this Section, (4(A)(I-III) for the period of calendar years 1987 through 1988.

E. An applicant seeking certification as a commercial applicator/master must also demonstrate practical knowledge in ecological and environmental concerns, pesticide container and rinsate disposal, spill and accident mitigation, pesticide storage and on site security, employee safety and training, potential chronic effects of exposure to pesticides, pesticide registration and special review, the potential for groundwater contamination, principles of pesticide drift and measures to reduce drift, protection of public health, minimizing public exposure and use of non pesticide control methods. In addition, applicant must demonstrate the ability to interact with a concerned public (Master Exam).

5. Certification Procedures for Commercial Applicators

A. Initial Certification

I. Application for Exams. All persons desiring to take exams must request

an application from the Board's office and submit all required information and fees.

a. Information shall include name, home address, company address, name and telephone number of supervisor and categories for which certification is desired.

b. A fee of \$10.00 for each category or subcategory exam shall accompany the application. All fees are waived for governmental employees.

II. Appointment for Exams. It shall be the responsibility of the applicant to contact the Board's office to arrange a convenient time to take the exams.

a. Exams will be available year-round on an appointment basis at the Board's office in Augusta. Appointments should be arranged at least 24 hours in advance of the desired date.

b. Exams will also be offered twice a year at regularly scheduled times at Portland, Bangor and Presque Isle. Appointments for these exams should be arranged with the Board's office in Augusta.

III. Exams. All applicants shall take a closed book core exam plus a closed book category technical exam on each applicable category or subcategory for which they anticipate making pesticide applications. In addition, applicants for commercial applicator/master certification must complete a closed book master exam. Applicants for commercial applicator/master must successfully complete the core and at least one category exam before being eligible to take the master exam.

IV. Examination Procedures. All applicants shall comply with these rules or forfeit their opportunity to complete the exams at a specified appointment.

a. Applicants should be present and ready to take the exams at the appointed time.

b. Applicants shall not talk during the examination period.

c. Applicants shall not be allowed to bring any books or papers into the examining room. Pencils and work sheets will be provided and all papers shall be collected at the end of the period.

d. Applicants shall not make notes of the exams and shall not leave the table during an exam.

e. Applicants will be allowed one hour in which to complete the core

exam and from one to two hours for the category exams, depending on the number of questions.

f. Applicants must successfully complete the core exam before being allowed to commence on any category exam.

V. **Qualification Requirements.** An applicant must achieve a passing score of 80 percent on each exam.

a. An applicant who fails the core exam may not reapply to take that examination prior to 14 days after the date of such examination.

b. An applicant who fails a category exam may not reapply to take that examination prior to 14 days after the date of such examination. An applicant who fails the same category examination a second time shall be required to retake both the core and category examinations.

c. An applicant who passes the core and one category exam shall be considered eligible for licensing in that particular category. If at a later date the applicant wishes to add another category, only the appropriate category exam shall be required.

d. An applicant who fails a master exam may not reapply to take that examination prior to 14 days after the date of such examination.

VI. **Expiration.** Certification under this section will be valid for 5 years from the date of successful completion of the exams.

B. **Recertification of Applicators**

I. As of December 31, 1986, a person with current valid certification may renew that certification by accumulating from 8 to 15 recertification credits depending upon the category or subcategory, over a 5 year period.

II. Recertification credits will be available through Board-approved meetings and industry and trade organization seminars, workshops where pesticide topics are presented and approved home study courses.

a. Board staff will review program agendas and monitor programs as time permits.

III. Credit will be allowed for topics including, but not limited to:

a. Applicable laws and regulations.

- b. Environmental hazards.
- c. Calibration and new application techniques.
- d. Label review.
- e. Applicator safety.
- f. Storage and disposal.
- g. Pest identification and control.
- h. Integrated pest management.

IV. Persons organizing meetings for which they want credits awarded must contact the Board in writing at least 15 days in advance of the meeting with details of the agenda. Board staff will review program agendas and assign credit values.

- a. One credit will be assigned for each 1 hour of presentation on appropriate topics.
- b. An individual who conducts a meeting for which the Board does assign recertification credits will be eligible for one credit for each 1 hour of presentation on appropriate topics.

V. Each participant will complete a triplicate form to verify attendance at each program for which credit is allowed. The participant is responsible for assuring that sponsors of out-of-state programs notify Board staff of attendance at such program.

VI. A person who fails to accumulate the necessary credits will have to pass exam(s) required for initial certification and within one year thereafter, obtain the balance of the recertification credits which that person failed to accumulate during the previous certification period.

6. Licensing

A. Application. Application for a commercial applicator license shall be on forms provided by the Board.

B. Fee. At the time of application, the applicant must tender the appropriate fee as follows:

I. For a commercial applicator license - \$20.00 per person.

II. For replacement or alteration - \$5.00.

C. Insurance. Commercial applicators who spray for hire (custom applicators) shall be required to have liability insurance in force at any time they make a pesticide application. This coverage must include chemical and/or pollution liability insurance whenever it is subject to subparagraph III hereof.

I. Applicators shall submit a completed and signed form provided by the Board at the time they apply for their license which attests that they will have the required amounts of insurance coverage in effect when they make pesticide treatments. The information submitted on the form must be true and correct.

II. Insurance coverage must meet or exceed the following minimum levels of liability:

a. Ground applicators:

Public liability \$100,000 each person
 \$300,000 each occurrence

Property damage \$100,000 each occurrence

As part of these requirements, an endorsement that modifies any pollution exclusion provision must be secured, subject to subparagraph III hereof.

b. Aircraft applicators:

Public liability \$100,000 each person
 \$300,000 each occurrence

Property damage \$100,000 each occurrence

As part of these requirements, coverage for chemical drift pursuant to legally carried out purposeful use of pesticides must be secured, subject to subparagraph III hereof.

III. The Board may from time to time waive the requirements of chemical and/or pollution liability coverage as to one or more segments of the applicator industry where the Board determines by certification that such coverage is not reasonably available to that segment of the industry. Such certification shall be made only following consultation with the State's Risk Management agency and following

an opportunity for public comment. If the Board takes action to waive the requirements of such coverage, it shall do so for a period of time specified by the Board, subject to renewal by the Board. Regardless of any waiver of the requirements of such coverage, the provisions of subparagraph IV shall apply.

IV. Applicators who are unable to obtain chemical and/or pollution liability coverage shall provide written disclosure to customers prior to entering into an agreement for services stating that the applicator or the company is unable to secure insurance coverage for such liability arising from the application of pesticides. This requirement shall take effect September 15, 1986.

a. This disclosure shall be on forms approved by the Board.

b. This disclosure shall be maintained by the applicator on file along with all other records required under Chapter 50 for a period of two (2) years.

D. Reports. All required reports described in Chapter 50 must have been submitted in proper form before a license will be processed.

E. Expiration. All licenses will expire at the end of each calendar year.

F. Decision. Within 60 days of receipt of application by the Board, unless the applicant agrees to a longer period of time, the Director shall issue, renew or deny the license. The Director's decision shall be considered final agency action for purposes of 5 M.R.S.A. § 11001 et seq.

G. Supervisory Agency. At the same time a governmental employee's application is processed, a governmental pesticide supervisor's agency license will also be issued to the government agency employing the applicant.

H. Reciprocity. Non-residents who are licensed by their home state or the federal government substantially in accordance with the certification standards of this Chapter may be issued Maine licenses without completing the Board's examinations.

I. Applicants must apply according to the provisions of this Chapter.

II. Applicants must also enclose a copy of the equivalent, current-year license from their home state showing the expiration date and types of activities in which they are licensed.

III. A Maine license issued on a reciprocal basis will bear a notation that it is a reciprocal license and the Director will notify the home state that the license has been issued.

IV. In the event a person licensed in another state becomes a resident of Maine, the person will be issued an equivalent Maine license as long as all other provisions of this Chapter and section are met.

7. Transition

These amendments to the Board's regulations shall be effective immediately except that the amendments to Section 2 (A)(6) shall be effective January 1, 1989.

AUTHORITY: 22 M.R.S.A., § 1471-D

EFFECTIVE DATE: January 1, 1983 (filed with Sec. of State
8/13/82)

Amendment effective December 29, 1982

Amendment effective January 1, 1984

Amendment effective January 1, 1984 - Section 7

Amendment effective May 20, 1984 - Section 6

Amendment effective May 13, 1985 - Section 5

Emergency amendment effective April 18, 1986 - Section 6

Amendment effective August 3, 1986 - Section 6

Amendment effective November 30, 1986-Sec.3

Amendment effective May 23, 1987 - Section 1

Amendment effective April 27, 1988

Amendment effective April 29, 1990

Chapter 32

CERTIFICATION & LICENSING PROVISIONS/PRIVATE APPLICATORS

SUMMARY: These regulations describe the requirements for certification and licensing of private applicators.

1. Definitions

- A. **Certification.** Certification is the recognition by the Board that an applicant has successfully fulfilled all the competency criteria as set forth in this Chapter.
- B. **Licensing.** Licensing is the issuance by the Board of a document signifying that the applicant has been certified and has met all fee requirements.
- C. **Private Applicator.** Private applicator is any person who uses or supervises the use of any limited or restricted use pesticide for the purpose of producing any agricultural commodity on property owned or rented by him or his employer or, if applied without compensation other than the trading of personal services between producers of agricultural commodities, on the property of another person. Persons producing agricultural commodities include farmers, ranchers, vineyardists, plant propagators, Christmas tree growers, aquaculturists, floriculturists, orchardists, foresters and other comparable persons who raise items primarily for sale, consumption, propagation or other use by humans or animals.

2. Competency Standards for Certification - Private Applicator

- A. No person shall be certified as a private applicator unless he has fulfilled requirements demonstrating his knowledge of basic subjects including pesticide labelling, safety, environmental concerns, pest organisms, pesticides, equipment, application techniques, and applicable laws and regulations (core exam).
- B. No person shall be certified as a private applicator unless he has demonstrated knowledge of the general principles of pest control for his major commodity, including specific pests of the crop, their life cycle, and proper timing of control measures to be efficacious (Commodity Exam).

3. Certification Procedures for Private Applicators

A. Initial Certification

- 1. As of January 1, 1983, a person seeking to be certified as a private applicator must pass a written core exam and a written exam in the area of his primary commodity.

- a. Both exams shall be closed book.
 - b. A score of 80% on each exam will be required to pass.
2. Exams may be taken at the close of a training course to encourage attendance at and participation in such course.
 - a. Exams will also be available on an appointment basis at the office of the Board and at cooperating County Extension Service offices.
3. A person who fails an exam must wait at least 14 days before retaking that exam.
4. At its discretion, the Board may, in special circumstances, offer the option of an oral exam to a person with recognized difficulty in reading.
 - a. The person requesting this option must identify another qualified individual from whom he can seek advice and guidance necessary for the safe and proper use of pesticides related to his certification.
 - b. The person identified as reader and advisor to applicant must be present at time of oral exam and acknowledge his willingness to assist the private applicator.
5. Certification under this section will be valid for 3 years and shall expire on October 31st of the third year.

B. Recertification

1. As of January 1, 1984, a person with current valid certification may renew that certification by accumulating 6 recertification credits over a 3 year period.
2. Recertification credits will be available through Board-approved meetings where pesticide topics are presented.
3. Credit will be allowed for topics including, but not limited to:
 - a. Applicable laws and regulations.
 - b. Environmental hazards.
 - c. Calibration and new application techniques.

- d. Label review.
- e. Applicator safety.
- f. Storage and disposal.
- g. Pest identification and control.
- h. Integrated pest management.

4. Persons organizing meetings for which they want credits awarded must contact the Board in writing at least 15 days in advance of the meeting and submit details of the pesticide topics, including titles and length of time devoted to them. Board staff will review program agendas and assign credit values. Board staff will monitor programs as time permits.

a. A minimum credit of one hour shall be assigned for each one hour of presentation on appropriate topics.

b. An individual conducts a meeting for which the Board does assign recertification credits will be eligible for one credit for each 1 hour of presentation on appropriate topics.

5. Each participant will complete a triplicate form to verify his attendance at each meeting for which credit is allowed. C.E.S. (Cooperative Extension Service) or other persons responsible for the program may distribute, collect and submit forms to the Board when our personnel are unavailable to attend.

6. A person who fails to accumulate the necessary credits will have to re-apply to take the exam required for initial certification.

4. Licensing

A. Application. Application for a private applicator license, shall be on forms provided by the Board.

B. Fee. At the time of application, the applicant must tender the appropriate fee as follows:

- 1. For a private applicator license - \$6.00 per person.
- 2. For replacement or alteration - \$5.00.

C. Expiration. Private applicator licenses are issued on a three-year period and will expire on October 31st of the third year.

D. Decision. Within 60 days of receipt of application by the Board, unless the applicant agrees to a longer period of time, the Director shall issue, renew or deny the license. The Director's decision shall be considered final agency action for purposes of 5 M.R.S.A. § 11001 et seq.

E. Reciprocity. Non-residents who are licensed by their home state or the federal government substantially in accordance with the certification standards of this Chapter may be issued Maine licenses without completing the Board's examinations.

1. The applicant must apply according to the provisions of this Chapter.
2. The applicant must also enclose a copy of the equivalent, current-year license from his home state showing the expiration date and types of activities in which he is licensed.
3. Maine licenses issued on a reciprocal basis will bear a notation that it is a reciprocal license and the Director will notify the home state that the license has been issued.
4. In the event a person licensed in another state becomes a resident of Maine, the person will be issued an equivalent Maine license as long as all other provisions of this Chapter and section are met.

5. Transition

The effective date of this regulation shall be January 1, 1983. Chapter 30 repealed, effective January 1, 1983.

For the purposes of transition, all private licenses and certifications that expire on April 30th will be extended to October 31st of the same year.

AUTHORITY: 22 M.R.S.A., 1471-D

EFFECTIVE DATE: January 1, 1983

AMENDMENT EFFECTIVE: December 6, 1987

Chapter 33

CERTIFICATION AND LICENSING PROVISIONS/GOVERNMENT PESTICIDE SUPERVISOR

SUMMARY: These regulations describe the requirements for certification and licensing of government pesticide supervisors.

1. Definitions

A. **Certification.** Certification is the recognition by the Board that an applicant has successfully fulfilled all the competency criteria as set forth in this Chapter.

B. **Government Pesticide Supervisor.** A government pesticide supervisor is any federal, state or local government agency, official or employee, whether or not the person is a private applicator with respect to some uses, who, in the course of his duties, responsibilities or employment, supervises the use of any pesticide.

C. **Licensing.** Licensing is the issuance by the Board of a document signifying that the applicant has been certified.

2. Categories of Government Pesticide Supervisors

A. All government pesticide supervisors shall be categorized according to the type of application supervised as outlined below:

1. Agricultural Pest Control

a. **Animal** - This subcategory includes government pesticide supervisors supervising the use of pesticides on animals and to places on or in which animals are confined. Doctors of Veterinary Medicine engaged in supervising the application of pesticides are included in this subcategory.

b. **Plant** - This subcategory includes government pesticide supervisors supervising the use of pesticides in the production of crops including blueberries, orchard fruit, potatoes, vegetables, forage, grain and industrial or non-food crops.

2. Forest Pest Control

a. **General Forest** - This subcategory includes government pesticide supervisors supervising the use of pesticides in forests, forest nurseries, and forest seed producing areas, except those uses described in subsection (b) below.

b. Forest Vegetation Management - This subcategory includes government pesticide supervisors supervising the treatment of forest lands with herbicides selectively, in such a way as to improve growth conditions for the species being managed.

3. Ornamental and Turf Pest Control

a. Arborists - This subcategory includes government pesticide supervisors supervising the use of pesticides to control pests in the maintenance and production of ornamental trees and shrubs. All arborists must also possess a license from the Maine Arborists Examining Board.

b. Floral and Turf - This subcategory includes government pesticide supervisors supervising the use of pesticides to control pests in the maintenance and production of ornamental flowers and turf grown outdoors.

c. Indoor Ornamentals - This subcategory includes government pesticide supervisors supervising the use of pesticides to control pests in the maintenance and production of live plants in shopping malls, businesses and institutions.

4. Seed Treatment

This category includes government pesticide supervisors supervising the use of pesticides on seeds.

5. Aquatic Pest Control

This category includes government pesticide supervisors supervising the use of pesticides applied directly to standing or running water, excluding applicators engaged in public health related activities included in category 8 below.

6. Right-of-Way Pest Control

This category includes government pesticide supervisors supervising the use of pesticides in the management of rights-of-way for public roads, electric power lines, pipelines, railroads or similar areas.

7. Industrial, Institutional, Structural and Health Related Pest Control

a. General - This subcategory includes government pesticide

supervisors using or supervising the use of pesticides in, on, or around human dwellings, office buildings, institutions such as schools and hospitals, industrial establishments including factories, warehouses and any other structures, vehicles, ships, aircraft, and adjacent areas; and for the protection of stored, processed, or manufactured products. This subcategory also includes government pesticide supervisors supervising the use of pesticides to control rodents on refuse areas and controlling other pests of concern to public health and safety, including but not limited to ticks, birds and mammals known to be vectors of disease.

b. Food Processing - This subcategory includes government pesticide supervisors supervising the use of pesticides in, on or around food processing, serving, handling, storage and transportation facilities including grain elevators and terminals. This subcategory also includes those government pesticide supervisors supervising the use of fumigation techniques in any type of structure or transportation device.

c. Cooling Water - This subcategory includes government pesticide supervisors supervising the use of pesticides to treat water in industrial cooling towers and air conditioning systems of commercial and institutional buildings.

d. Wood Preserving - This subcategory includes government pesticide supervisors supervising the use of pesticides to treat lumber, poles, railroad ties and other types of wooden structures including bridges, shops and homes.

e. Biting Fly - This subcategory includes government pesticide supervisors and non-public health governmental officials supervising the use of pesticides in management and control of biting flies of public health and public nuisance importance, including but not limited to mosquitoes, black flies, midges, and members of the horsefly family.

8. Public Health Pest Control

a. Biting Fly Pests - This subcategory includes government pesticide supervisors supervising the use of pesticides in management and control of potential disease vectors or other pests having medical and public health importance, including but not limited to mosquitoes, black flies, midges, and members of the horsefly family.

b. Other Pests - This subcategory includes government pesticide

supervisors supervising the use of pesticides in programs for controlling other pests of concern to public health, including but not limited to ticks, and bird and mammal vectors of human disease.

9. Regulatory Pest Control

This category includes government pesticide supervisors supervising the use of pesticides in the control of pests regulated by the U.S. Animal and Plant Health Inspection Service or some other governmental agency.

10. Demonstration and Research Pest Control

This category includes all government pesticide supervisors who (1) demonstrate to the public the proper use and techniques of application of pesticides or supervise such demonstration, or, and (2) conduct field research with pesticides, and in doing so, use or supervise the use of pesticides. Individuals who conduct only laboratory-type research are not included.

11. Aerial Pest Control

This category includes government pesticide supervisors, including pilots and co-pilots, supervising the application of pesticides by means of any aircraft.

3. Competency Standards for Certification of Government Pesticide Supervisors

A. No person shall be certified as a government pesticide supervisor unless he has established his competency in the general principles of safe pest control by demonstrating knowledge of basic subjects including pesticide labelling, safety, environmental concerns, pest organisms, pesticides, equipment, application techniques and applicable law and regulations. (Core Exam).

B. No person shall be certified as a government pesticide supervisor unless he has established his competency in each applicable category or subcategory. (Category Exam). Competency in the applicable category or subcategory shall be established as follows:

1. Agricultural Pest Control

a. Animals - No persons shall be certified in the subcategory of Animal Pest Control as described in 2(A)(1)(a) unless he has demonstrated a knowledge of animals, their associated pests, and methods of pest control. Areas of practical knowledge shall include specific toxicity, residue potential, relative hazards of different formulations,

application techniques, and hazards associated with age of animals, stress, and extent of treatment.

b. Plant. No persons shall be certified in the subcategory of Plant Pest Control as described in § 2(A)(1)(b) unless he has demonstrated a knowledge of the crops grown and the specific pests of those crops on which he may be using limited or restricted-use pesticides. Areas of such practical knowledge shall include soil and water problems, preharvest intervals, reentry intervals, phytotoxicity, potential for environmental contamination, non-target injury, community problems related to pesticide use in certain areas, pesticide-organism interactions, and integration of pesticide use with other control methods.

2. Forest Pest Control

a. General Forest. No persons shall be certified in the subcategory of General Forest Pest Control as described in § 2(A)(2)(a) unless he has demonstrated a practical knowledge of forest tree biology and associated pests. Such required knowledge shall include population dynamics of pest species, pesticide-organism interactions, integration of pesticide use with other pest control methods, environmental contamination, pesticide effects on non-target organisms, and use of specialized equipment.

b. Forest Vegetation Management. No person shall be certified in the subcategory of Forest Vegetation Management as described in § 2(A)(2)(b) unless he has demonstrated a practical knowledge of forest types and of the rationale behind forest vegetation management. Such knowledge shall include methodologies, rational for selecting chemical over mechanical methods, and awareness of pesticide effects upon wildlife species and general aesthetics of wooded areas.

3. Ornamental and Turf Pest Control

a. Arborists. No person shall be certified in the Arborist subcategory as defined in § 2(A)(3)(a) unless he has demonstrated a practical and theoretical knowledge of his field to the level required for certification by the Arborists Examining Board, Maine Bureau of Forestry (Title 32 M.R.S.A., Chapter 29, Subchapter 2).

b. Floral and Turf. No person shall be certified in the Floral and Turf subcategory as described in § 2(A)(3)(b) unless he has demonstrated a practical knowledge of pesticide problems associated with the production

and maintenance of floral plantings and turf. Such knowledge shall include potential phytotoxicity, drift problems, undue pesticide persistence, and application methods, with particular reference to techniques used in proximity to human habitations.

c. Indoor Ornamentals. No person shall be certified in the Indoor Ornamental subcategory described in § 2(A)(3)(c) unless he has demonstrated practical knowledge of pesticide problems associated with the production and maintenance of indoor ornamental plantings. Such knowledge shall include pest recognition, proper pesticide selection, undue pesticide persistence, and application methods, with particular reference to techniques used in proximity to human presence.

4. Seed Treatment

No person shall be certified in the category of Seed Treatment as described in § 2(A)(4) unless he has demonstrated practical knowledge of seed types and problems requiring chemical treatment. Such knowledge shall include seed coloring agents, carriers and binders which may affect germination, hazards associated with handling, sorting, and mixing in the treatment process, hazards of introduction of treated seed into food and feed channels, and proper disposal of unused treated seeds.

5. Aquatic Pest Control

No person shall be certified in the category of Aquatic Pest Control as described § 2(A)(5) unless he has demonstrated practical knowledge of proper methods of aquatic pesticide application and a recognition of the adverse effects which can be caused by improper techniques, dosage rates, and formulations. Such knowledge shall include basic factors contributing to the development of nuisance aquatic plant growth such as algal blooms, understanding of various water use situations and potential downstream effects from pesticide use, and potential effects of various aquatic pesticides on plants, fish, birds, insects and other organisms associated with the aquatic environment.

6. Right-of-Way Pest Control

No person shall be certified in the category of Right-of-Way Pest Control as described in § 2(A)(6) unless he has demonstrated practical knowledge of the impact of right-of-way pesticide use on a wide variety of environments. Such knowledge shall include an ability to recognize target organisms, awareness of problems of runoff, drift, and root pickup, problems and aesthetic considerations

associated with excessive foliage destruction and "brown-out", and an understanding of the mode of action of right-of-way herbicides, and reasons for the choice of particular chemicals for particular problems, importance of the assessment of potential impact of right-of-way spraying on adjacent public and private properties and activities, and effects of right-of-way spraying on fish and wildlife species and their habitat.

7. ~~Industrial~~ Industrial, Institutional, Structural and Health Related Pest Control

a. General. No person shall be certified in the subcategory of General Pest Control as described in § 2(A)(7)(a) unless he has demonstrated a practical knowledge of a wide variety of pests and methods for their control. Such knowledge shall include identification of frequently encountered pests, appropriate application equipment and techniques for indoor and outdoor uses, and proper measures to avoid risk to humans, domestic animals, and the environment.

b. Food Processing. No person shall be certified in the subcategory of Food Processing as described in § 2(A)(7)(b) unless he has demonstrated a practical knowledge of a wide variety of pests and methods for their control. Such knowledge shall include identification of pests and knowledge of life cycles, formulations appropriate for use in food processing, serving, handling, storage, and transportation facilities, special types of application including ultra-low volume and fumigation, methods to avoid contamination of food and damage to structures and furnishings, and avoidance of risk to employees and customers.

c. Cooling Water. No person shall be certified in the Cooling Water subcategory described in § 2(A)(7)(c) unless he has demonstrated practical knowledge of cooling water organisms and their life cycles, cooling water system designs, labels and hazards of cooling water pesticides, and proper application techniques to assure adequate control while minimizing exposure to humans and the environment.

d. Wood Preserving. No person shall be certified in the Wood Preserving subcategory described in § 2(A)(7)(d) unless he has demonstrated practical knowledge of wood destroying organisms and their life cycles, nonchemical control methods, pesticides appropriate for wood preservation, hazards associated with their use, and proper application techniques to assure adequate control while minimizing exposure to humans, livestock and the environment.

e. Biting Fly Pests. No person shall be certified in the subcategory of Biting Fly Pest Control as described in § 2(A)(7)(e) unless he has demonstrated a practical knowledge of the species involved, their potential roles in disease transmission, and the use of pesticides in their control. Such knowledge shall include identification of and familiarity with life cycles and habitat requirements, special environmental hazards associated with the use of pesticides in control programs, and knowledge of the importance of integrating chemical and non-chemical control methods.

8. Public Health Pest Control

a. Biting Fly Pests. No person shall be certified in the subcategory of Biting Fly Pest Control as described in § 2(A)(8)(a) unless he has demonstrated a practical knowledge of the species involved, their potential roles in disease transmission, and the use of pesticides in their control. Such knowledge shall include identification of and familiarity with life cycles and habitat requirements, special environmental hazards associated with the use of pesticides in control programs, and knowledge of the importance of integrating chemical and non-chemical control methods.

b. Other Pests. No person shall be certified in the subcategory of Other Pest Control as described in § 2(A)(8)(b) unless he has demonstrated a practical knowledge of the species involved, their potential roles in disease transmission, and the use of pesticides in their control. Such knowledge shall include identification of and familiarity with life cycles and habitat requirements, special environmental hazards associated with the use of pesticides in control programs, and knowledge of the importance of integrating chemical and non-chemical control methods.

9. Regulatory Pest Control

No person shall be certified in the category of Regulatory Pest Control as described in § 2(A)(9) unless he has demonstrated practical knowledge of regulated pests and applicable laws relating to quarantine and other regulation of pests. Such knowledge shall also include environmental impact of pesticide use in eradication and suppression programs, and factors influencing introduction, spread and population dynamics of relevant pests.

10. Demonstration and Research Pest Control

No person shall be certified in the category of Demonstration and Research Pest Control as described in § 2(A)(10) unless he has demonstrated practical

knowledge in the broad spectrum of activities involved in advising other applicators and the public as to the safe and effective use of pesticides. Persons involved specifically in demonstration activities will be required to demonstrate knowledge of pesticide-organism interactions, the importance of integrating chemical and non-chemical control methods, and a grasp of the pests, life cycles and problems appropriate to the particular demonstration situation. Field researchers will be required to demonstrate general knowledge of pesticides and pesticide safety, as well as a familiarity with the specific standards of this section which apply to their particular areas of experimentation. All individuals certified in this category must also be certified in one or more of the previous categories or subcategories which represent at least 80% of their practice.

11. Aerial Pest Control

No person shall be certified in the category of Aerial Pest Control as described in § 2(A)(11) unless he has demonstrated at least a practical knowledge of problems which are of special significance in aerial application of pesticides, including weather and drift; chemical dispersal equipment, tank, pump and plumbing arrangements; nozzle selection and location; ultra-low volume systems; aircraft calibration; field flight patterns; droplet size considerations; flagging methods; loading procedures. He must also demonstrate competency in the specific category or subcategory in which he proposes to work, as described in paragraphs 1, 2, 6 and 8 herein.

4. Certification Procedures for Government Pesticide Supervisors

A. Initial Certification

1. Application for Exams. All persons desiring to take exams must request an application from the Board's office and submit all required information.

a. Information shall include name, home address, name and telephone number of governmental agency and categories for which certification is desired.

b. All fees are waived for governmental employees.

2. Appointment for Exams. It shall be the responsibility of the applicant to contact the Board's office to arrange a convenient time to take the exams.

a. Exams will be available year-round on an appointment basis at the Board's office in Augusta. Appointments should be arranged at least 24

hours in advance of the desired date.

b. Exams will also be offered twice a year at regularly scheduled times at Portland, Bangor and Presque Isle. Appointments for these exams should be arranged with the Board's office in Augusta.

3. Exams. All applicants shall take a closed book core exam plus a closed book category technical exam on each applicable category or subcategory for which they anticipate supervising pesticide applications.

4. Examination Procedures. All applicants shall comply with these rules or forfeit their opportunity to complete the exams at a specified appointment.

a. Applicants should be present and ready to take the exams at the appointed time.

b. Applicants shall not talk during the examination period.

c. Applicants shall not be allowed to bring any books or papers into the examining room. Pencils and work sheets will be provided and all papers shall be collected at the end of the period.

d. Applicants shall not make notes of the exams and shall not leave the table during an exam.

e. Applicants will be allowed one hour in which to complete the core exam and from one to two hours for the category exams, depending on the number of questions.

f. Applicants must successfully complete the core exams before being allowed to commence on any category exam.

5. Qualification requirements. An applicant must achieve a passing score of 80 percent on each exam.

a. An applicant who fails the core exam may not reapply to take that examination prior to 14 days after the date of such examination.

b. An applicant who fails a category exam may not reapply to take that examination prior to 14 days after the date of such examination. An applicant who fails the same category examination a second time shall be

required to retake both the core and category examinations.

c. An applicant who passes the core and one category exam shall be considered eligible for licensing in that particular category. If at a later date the applicant wishes to add another category, he will only have to take the appropriate category exam.

6. Expiration. Certification under this section will be valid for 5 years from the date of successful completion of the exams.

B. Recertification of Applicators

1. As of December 31, 1986, a person with current valid certification may renew that certification by accumulating from 8 to 15 recertification credits depending upon the category or subcategory, over a 5 year period in each applicable category and subcategory.

2. Recertification credits will be available through Board approved meetings and industry and trade organization seminars and workshops where pesticide topics are presented.

a. Board staff will review program agendas and monitor programs as time permits.

3. Credit will be allowed for topics including but not limited to:

- a. Applicable laws and regulations,
- b. Environmental hazards,
- c. Calibration and new application techniques,
- d. Label review,
- e. Applicator safety,
- f. Storage and disposal,
- g. Pest identification control,
- h. Integrated pest management.

4. Persons organizing meetings for which they want credits awarded must contact the Board in writing at least 15 days in advance of the meeting with details of the agenda. Board staff will review program agendas and assign credit values.

a. One credit will be assigned for each 1 hour of presentation on appropriate topics.

b. An individual who conducts a meeting for which the Board does assign recertification credits will be eligible for one credit for each 1 hour of presentation on appropriate topics.

5. Each participant will complete a triplicate form to verify his attendance at each program for which credit is allowed. The participant is responsible for assuring that sponsors of out-of-state programs notify Board staff of his attendance at such programs.

6. A person who fails to accumulate the necessary credits will have to re-apply to take the exam required for initial certification.

5. Licensing

A. Application. Application for a government pesticide supervisor license shall be on forms provided by the Board.

B. Expiration. All licenses will expire at the end of each calendar year.

C. Decision. Within 60 days of receipt of application by the Board, unless the applicant agrees to a longer period of time, the Director shall issue, renew or deny the license. The Director's decision shall be considered final agency action for purposes of 5 M.R.S.A. § 11001 et seq.

D. Supervisory Agency. At the same time a governmental employee's application is processed, a governmental pesticide supervisor's agency license will also be issued to the government agency employing the applicant.

6. Transition

The effective date of this regulation shall be January 1, 1983. Chapter 30 repealed, effective January 1, 1983.

AUTHORITY: 22 M.R.S.A., 1471-D

EFFECTIVE DATE: January 1, 1983

Chapter 34

CERTIFICATION AND LICENSING PROVISIONS/DEALERS

SUMMARY: These regulations describe the requirements for certification and licensing of pesticide dealers.

1. Definitions

A. **Certification.** Certification is the recognition by the Board that an applicant has successfully fulfilled all the competency criteria as set forth in this Chapter.

B. **Licensing.** Licensing is the issuance by the Board of a document signifying that the applicant has been certified and has met all fee, insurance and reporting requirements.

C. **Pesticide Dealer.** A pesticide dealer is a person who distributes limited or restricted use pesticides. Such persons include, but are not limited to, sales personnel in an outlet, field salesmen, and manufacturer representatives who accept orders for pesticides.

2. Competency Standards for Certification

A. No person shall be certified as a pesticide dealer unless he has demonstrated a knowledge of pesticide classifications, formulations, labelling, safety, storage and applicable laws and regulations.

3. Certification Procedures for Pesticide Dealers

A. Initial Certification

1. **Application for Exams.** All persons desiring to take exams must request an application from the Board's office and submit all required information and fees.

a. Information shall include name, home address, name and telephone number of company and company address.

b. A fee of \$10.00 for each exam shall accompany the application.

2. **Appointment for Exams.** It shall be the responsibility of the applicant to contact the Board's office to arrange a convenient time to take the exams.

a. Exams will be available year-round on an appointment basis at the Board's office in Augusta. Appointments should be arranged at least 24

hours in advance of the desired date.

b. Exams will also be offered twice a year at regularly scheduled times at Portland, Bangor and Presque Isle. Appointments for these exams should be arranged with the Board's office in Augusta.

3. Examinations. All applicants shall complete the closed book dealer exam covering subjects specified in Section 2.

4. Examination Procedure. All applicants shall comply with these rules or forfeit their opportunity to complete the exams at a specified appointment.

a. Applicants should be present and ready to take the exams at the appointed time.

b. Applicants shall not talk during the examination period.

c. Applicants shall not be allowed to bring any books or papers into the examining room. Pencils and work sheets will be provided and all papers shall be collected at the end of the period.

d. Applicants shall not make notes of the exams and shall not leave the table during an exam.

e. Applicants will be allowed one hour in which to complete the exam.

5. Qualification. An applicant desiring to qualify for dealer certification must achieve a passing score of 80 percent. An applicant who fails the exam may not re-apply to take the examination prior to 14 days after the date of such examination.

6. Expiration. Certification under this section will be valid for 5 years from the date of successful completion of the exams.

B. Recertification

1. As of January 1, 1984, a person with current valid certification may renew that certification by accumulating 15 recertification credits over a 5 year period.

2. Recertification credits will be available through Board-approved meetings where pesticide topics are presented.

3. Credit will be allowed for topics including but not limited to:

- a. Applicable laws and regulations,
- b. Label review,
- c. Pesticide formulations,
- d. Applicator safety,
- e. Storage and disposal,
- f. Pest identification control,
- g. Integrated pest management.

4. Persons organizing meetings for which they want credits awarded must contact the Board in writing at least 15 days in advance of the meeting and submit details of the pesticide topics, including titles and length of time devoted to them. Board staff will review program agendas and assign credit values. Board staff will monitor programs as time permits.

5. A minimum credit of one hour shall be assigned for each one hour of presentation on appropriate topics.

6. An individual who conducts a meeting for which the Board does assign recertification credits will be eligible for one credit for each 1 hour of presentation on appropriate topics.

7. Each participant will complete a triplicate form to verify his attendance at each meeting for which credit is allowed. Organizers of the meeting will be responsible for verifying attendance when Board personnel are unable to be present.

8. A person who fails to accumulate the necessary credits will have to re-apply to take the exam required for initial certification.

4. Licensing

A. Application. Application for a pesticide dealer license shall be on forms provided

by the Board.

B. Fee. At the time of application, the applicant must tender the appropriate fee as follows:

1. For a pesticide dealer license - \$20.00 per location or outlet; \$20.00 per salesman operating outside location.
2. For replacement or alteration - \$5.00.

C. Reports. All required reports described in Chapter 50 must have been submitted in proper form before a license will be processed.

D. Expiration. All licenses will expire at the end of each calendar year.

E. Reciprocity. Non-residents who are licensed by their home state or the federal government substantially in accordance with the certification standards of this Chapter may be issued Maine licenses without completing the Board's examinations.

1. The applicant must apply according to the provisions of this Chapter.
2. The applicant must also enclose a copy of the equivalent, current-year license from his home state showing the expiration date and types of activities for which he is licensed.
3. A Maine license issued on a reciprocal basis will bear a notation that it is a reciprocal license and the Director will notify the home state that the license has been issued.
4. In the event a person licensed in another state becomes a resident of Maine, the person will be issued an equivalent Maine license as long as all other provisions of this Chapter and section are met.

5. Special Dealer Requirements

A. Each dealer shall be responsible for the acts of those people in his employ and the dealer's license shall be subject to denial, suspension or revocation for any violation of the statute or regulations, whether committed by the dealer, his office, agent, employee, or other person acting in concert or participation with him.

B. A licensed dealer must be present in the outlet at the time of sale of a restricted use pesticide so that he may supervise the transaction.

C. Restricted-use and limited-use pesticides shall be stored separately in an area not accessible for self service.

D. No dealer shall sell any limited or restricted-use pesticides to any person who does not have in his possession valid certification credentials.

E. Dealers shall either maintain a record of restricted sales on a separate file for each applicator or maintain a separate form on which all restricted sales are recorded.

6. Transition

The effective date of this regulation shall be January 1, 1983. Chapter 30 repealed, effective January 1, 1983.

AUTHORITY: 22 M.R.S.A., 1471-D

EFFECTIVE DATE: January 1, 1983.

Chapter 35

CERTIFICATION AND LICENSING PROVISIONS/SPRAY CONTRACTING FIRMS

SUMMARY: These regulations describe the requirements for certification and licensing of spray contracting firms.

1. Definition

For purposes of this Chapter, the following words shall have the following meanings, unless the context otherwise requires.

A. **Certification.** Certification is the recognition by the Board that an applicant has successfully fulfilled all the competency criteria as set forth in this Chapter.

B. **Licensing.** Licensing is the issuance by the Board of a document signifying that the applicant has been certified and has met all employee, fee, insurance, reporting and other requirements.

C. **Major forest insect aerial spray application.** Major forest insect aerial spray application means a project to apply pesticides against a forest insect pest by aerial application over an area containing at least 1,000 acres in the aggregate.

D. **Minor forest insect aerial spray application.** Minor forest insect aerial spray application means a project to apply pesticides against a forest insect pest by aerial application over an area containing less than 1,000 acres in the aggregate.

E. **Monitor** means a person working on a public or private forest insect aerial spray application project whose primary responsibilities are to observe and record meteorological conditions during spray operations, observe and record spray behavior, prepare spray period reports, and who has the authority to cease spray applications when conditions require it.

F. **Spotter.** Spotter means a person working on a public or private forest insect aerial spray application project who is responsible for ordering the cessation of spraying over water bodies and other non-target areas.

G. **Spray contracting firm.** Spray contracting firm means a person, as defined in Chapter 10, employed or contracted to conduct a public or private custom application or of one or more pesticides. This term does not include the owner or lessee of land to be sprayed, employees of that landowner or lessee, the Bureau of Forestry, the employees of the Bureau of Forestry or individuals who are certified as commercial applicators; providing that any individual who employs one or more others to undertake spray applications shall be deemed a spray contracting firm.

2. Competency Standards for Certification

A. No person shall be certified as a spray contracting firm unless it demonstrates that the firm will have or arrange for a sufficient number of licensed Master and Operator applicators to supervise and conduct the program in accordance with all applicable laws and regulations, and that such firm will otherwise be competent to responsibly make a pesticide application. Where a major forest insect aerial spray program is undertaken, the firm must also demonstrate that there will be an adequate number of licensed spotters to accompany each spray team. A responsible official of the contracting firm will sign a statement attesting that he/she is familiar with and that the contracting firm will comply with all statutes, rules, and guidelines of the Board.

3. Certification Procedures

A. All applicants must complete and submit an application provided by the Board which details the organizational structure of the spray contracting firm.

1. Information shall include the firm name, chief officer, telephone number and location of the company headquarters, and business mailing address.

2. Information shall also include a listing of all Master applicators who shall have responsibility for spray programs conducted in Maine along with their business locations and telephone numbers.

3. Information shall also be included, as required on the application form, which demonstrates whether the firm has the necessary competence to responsibly apply pesticides in Maine.

4. Licensing

A. Application. Application for a spray contracting firm license shall be on the same form provided by the Board for certification information.

B. Fee. At the time of application, the applicant must submit a fee of \$100.00.

1. For replacement or alteration - \$5.00.

C. Insurance. An applicant must submit a completed and signed form, provided by the Board, which attests that the spray contracting firm will have the required amounts of insurance specified in Chapter 31 in effect when any employee or agent makes a pesticide application.

D. Reports. All reports required up to the date of application under the Board's regulations must have been submitted in proper form before a license will be processed.

E. Decision. Within 15 days of receipt of application by the Board, unless the applicant agrees to a longer period of time, the Director shall issue, renew or deny the license. The Director's decision shall be considered final agency action for purposes of 5 M.R.S.A. § 11001 et seq.

F. Refusal to Renew. The Board may refuse to renew a license if it is not in accordance with any of the requirements hereof or if the Board makes, as to the licensee, any of the findings set forth in 22 M.R.S.A. § 1471-D (8), which describe the bases for a decision by the Administrative Court to suspend or revoke a license. If the Board determines that there is evidence sufficient to refuse to renew a license, it shall give notice and an opportunity for a hearing before the Board prior to making that determination final.

G. Expiration. All spray contracting firm licenses will expire at the end of each calendar year.

5. Special Spray Contracting Firm Requirements

A. No spray contracting firm may use or supervise the use of any pesticide within the State without prior certification from the Board.

B. Each spray contracting firm shall be responsible for the acts of those people in its employ and its license shall be subject to denial, refusal to renew, suspension, or revocation, and such firm shall otherwise be punishable under the law, for any violation of the statutes or regulations, whether committed by the owner, chief officer, agent, employee or other person acting in concert or participation with it.

C. No spray contracting firm shall make a forest insect aerial spray application until it ascertains that legally required notification has been given to the public and the Board, and there has been compliance with all other requirements for such an application, including any required licensing of its employees, agents and independent contractors and their employees.

D. No spray contracting firm shall make a major forest insect aerial spray application unless licensed applicators, spotters and monitors are in place to direct or monitor each spray aircraft or each team of spray aircraft during actual applications.

E. A spray contracting firm shall cause its licensed spotters and other employees and agents to prepare reports, as required by law.

6. Transition

The effective date of this regulation shall be February 6, 1985.

AUTHORITY: 22 M.R.S.A. 1471-D

EFFECTIVE DATE: February 6, 1985

AMENDMENT EFFECTIVE: January 12, 1986

Chapter 36

CERTIFICATION AND LICENSING PROVISIONS/MONITORS AND SPOTTERS FOR MAJOR FOREST INSECT AERIAL SPRAY PROGRAMS

SUMMARY: These regulations describe the requirements for certification and licensing of monitors and spotters for major forest insect aerial spray programs.

1. Definitions

For purposes of this Chapter, the following words shall have the following meanings, unless the context otherwise requires:

- A. **Certification.** Certification is the recognition by the Board that an applicant has successfully fulfilled all the competency criteria as set forth in this Chapter.
- B. **Licensing.** Licensing is the issuance by the Board of a document signifying that the applicant has been certified and has met all fee and other requirements.
- C. **Major Forest Insect Aerial Spray Application.** Major forest insect aerial spray application means a project to apply pesticides against a forest insect pest by aerial application over an area containing at least 1,000 acres in the aggregate.
- D. **Minor Forest Insect Aerial Spray Application.** Minor forest insect pest by aerial application over an area containing less than 1,000 acres in the aggregate.
- E. **Monitor.** Monitor means a person working on a major public or private forest insect aerial spray application project whose primary responsibilities are to observe and record meteorological conditions during spray operations, observe and record spray behavior, prepare spray period reports and who has the authority to cease spray applications when conditions require it.
- F. **Spotter.** Spotter means a person working on a major public or private forest insect aerial spray application project who is responsible for ordering the cessation of spraying over water bodies and other non-target areas.
- G. **Spray Period.** Spray period means any period of a forest insect aerial spray application project during which pesticides are applied and which is demarcated from another spray period by at least a 2 hour cessation in pesticide application.
- H. **Spray Period Report.** Spray period report means a written description of the spray activity certifying the date and time, the area usually sprayed, the pesticide used, and including a description of the weather conditions during spray activity. The report must also include a map showing where spray booms were turned on and off, with notation of any non-target areas that were sprayed.

2. Competency Standards for Certification - Monitor and Spotter

A. No person shall be certified as a monitor or spotter unless he/she has demonstrated, by written exam, knowledge of pertinent subjects including pesticide labelling, safety, environmental concerns, pest organisms, pesticides, equipment, application techniques, Board regulations, guidelines, map reading, radio procedures, aerial navigation and orientation, meteorological conditions affecting spray deposition, and aerial spray patterns.

B. No person shall be certified as a monitor or spotter unless he/she has 20/20 corrected vision.

3. Certification Procedures for Monitors and Spotters

A. Initial Certification

1. Beginning January 1, 1985, a person seeking to be certified as a monitor or spotter must pass a written monitor/spotter exam.

a. The exam shall be closed book.

b. A score of 80% or more will be required to pass.

2. Application for Exam. All persons desiring to take the exam must request an application from the Board's office and submit all required information and fees.

a. Information shall include name, home address, company address and name and telephone number of supervisor.

b. A fee of \$50.00 shall accompany the application unless prior arrangements for payment are made with the Board.

3. Appointment for Exams. It shall be the responsibility of the applicant to contact the Board's office to arrange a convenient time to take the exams.

a. Exams will be available year-round on an appointment basis at the Board's office in Augusta. Appointments should be arranged at least 24 hours in advance of the desired date.

b. Exams will also be offered at the completion of organized training programs. The sponsors of such courses should contact the Board at least

15 days in advance of the desired date so that staff will be able to offer the exams.

4. A person who fails an exam must wait at least 48 hours before retaking that exam. If a person fails the exam a second time, he/she must wait seven days before retaking the exam.

5. Certification under this section shall be valid for a five year period.

B. Recertification

1. All certified monitors and spotters must earn 15 recertification credits over a five year period in order to be recertified without having to be re-examined.

2. As of January 1, 1985, a person with a current valid certification may begin to earn 15 recertification credits over a five year period by attending approved training courses.

3. Recertification credits will be available through Board approved courses where pertinent topics are presented.

4. Credit will be allowed for topics including but not limited to:

- a. Applicable laws, regulations and guidelines.
- b. Environmental hazards.
- c. Pesticide labelling.
- d. Map reading.
- e. Aerial navigation.
- f. Radio procedures.
- g. Meteorologic conditions affecting aerial spray.
- h. Meteorological data gathering procedures.
- i. Aerial application techniques.

5. Persons organizing courses for which they want credits awarded must contact the Board in writing at least 15 days in advance of the course and submit details of the pesticide topics, including titles and length of time devoted to them. Board staff will review course agendas and assign credit values. Board staff will monitor courses as time permits.

a. A minimum credit of one hour shall be assigned for each one hour of presentations on appropriate topics.

b. An individual conducting courses for which the Board does assign recertification credits will be eligible for one credit for each hour of presentation on appropriate topics.

6. Each participant will complete a triplicate form to verify his attendance at each course for which credit is allowed. Board personnel or other persons responsible for the program may distribute, collect, and submit forms to the Board.

7. A person who fails to accumulate the necessary credits will have to re-apply to take the exam required for initial certification.

4. Licensing

A. Application. Application for a monitor's or spotter's license shall be on forms provided by the Board.

B. Fee. A fee of \$20.00 shall accompany each application.

C. Decision. Within 1 day of receipt of application by the Board unless the applicant agrees to a longer period of time, the Director shall issue, renew or deny the license. The Director's decision shall be considered final agency action for purposes of 5 M.R.S.A. § 11001 et seq.

D. Refusal to Renew. The Board may refuse to renew a license if it is not in accordance with any of the requirements hereof or if the Board makes, as to the licensee, any of the findings set forth in 22 M.R.S.A. § 1471-D(8), which describe the bases for a decision by the Administrative Court to suspend or revoke a license. If the Board determines that there is evidence sufficient to refuse to renew a license, it shall give notice and an opportunity for a hearing before the Board prior to making that determination final.

E. Expiration. All monitor and spotter licenses will expire at the end of each calendar year.

5. Special Monitor and Spotter Requirements

A. No person shall act as a monitor or spotter without prior certification and issuance of a currently valid license from the Board for that purpose.

B. Monitors and spotters shall prepare written spray period reports for each and every spray period according to procedures outlined in Chapter 50.

6. Transition

The effective date of this regulation shall be February 6, 1985.

AUTHORITY: 22 M.R.S.A., 1471-D

EFFECTIVE DATE: FEBRUARY 6, 1985

Chapter 40

MAINE RESTRICTED AND LIMITED USE PESTICIDES

SUMMARY: These regulations list the pesticides classified by the Board as restricted use or limited use and describe procedures governing their sale and use:

1. Restricted Use Pesticides

A. The following chemicals are restricted use pesticides to be sold by licensed dealers to licensed applicators:

acrolein (Aqualin)	formetanate hydrochloride (Carzol)
acrylonitrile	hydrocyanic acid
aldicarb (Temik)	mercury compounds
allyl alcohol	methamidophos (Monitor)
aluminum phosphide	methidathion (Supracide)
4-AP (Avitrol)	methomyl (Lannate-all uses except
arsenic compounds (above 2%)	bait fomulations less than 2%
azinphos-ethyl (Ethyl Guthion)	methomyl)
azinphos-methyl (Guthion)	methyl bromide
benzene hexachloride	methyl parathion (see limited use
cadmium compounds	also)
carbon disulfide	mevinphos (Phosdrin, above 2%)
carbon tetrachloride(as a pesticide)	monocrotophos (Azodrin)
carbofuran (Furadan, above 10%)	nicotine alkaloid
carbophenothion (Trithion)	nicotine salts (above 40% expressed
chloropicrin	as alkaloid)
chlorfenvinphos (4072)	oxamyl (Vydate)
cyanides	*oxydemeton-methyl (Metasystox-R,
cyclohexanide (Actidione, above 1.3%)	above 40%)
daminozide (B-Nine but not Alar	paraquat (above 0.2%)
which is limited use)	
demeton (Systox)	parathion
dichlorvos (Vapona, DDVP, above 25%)	phorate (Thimet)
dicrotophos (Bidrin)	phosphamidon
dinoseb (DNBP, Dow General, Premerge,	phosphorus (white and yellow)
Sinox General, Chemox General)	phostoxin
**disulfoton (Disyston, above 1%)	picloram (Tordon, except for
DNOC (Sinox, above 2%)	Tordon 101R Forestry herbicide
DNOCHP (DN-111)	which is not restricted)
***EBDC fungicides (Maneb, Mancozeb	schradan
Dithane, Polyram, Metiram, etc)	selenium compounds
except dry flowable and liquid	strychnine
formulations	sulfotepp
endosulfan (Thiodan, above 10%)	sulfuryl floride
endothall	TEPP
EPN	terpene polychlorinates (Strobane)
ethion (above 40%)	thionazine (above 2%)

(Continued Next Page)

(Restricted Use Pesticides Continued)

ethylene dibromide
famfur (Warbex, above 1%)

*fensulfothion (Dasanit, above 10%)
fenthion (Baytex)
fonophos (Dyfonate, above 15%)

*All granular formulations of these compounds unrestricted, regardless of concentration.

**Granular formulations of 10% and above are restricted.

***All dusts and wettable powder formulations restricted, regardless of concentration.

2. Limited Use Pesticides

A. The following chemicals are limited use pesticides and may only be sold to persons holding a permit from the Board to use this material:

Aldrin
Chlordane
DDD
DDT
Daminozide (Alar-85, except for
B-Nine which is only restricted)*
Dieldrin
Endrin
Fluoroacetamide (Compound 1081)

Heptachlor
Lindane
Methyl Parathion (Microencapsulated
forms only)
Sodium monofluoroacetate (1080)
Thallium salts
Toxaphene
Trichlorfon (Dylox)

*Emergency rule expires 90 days after adoption

B. Restricted use pesticides may be sold only by pesticide dealers licensed by the Board as provided in Chapter 34.

C. Restricted use pesticides may be purchased and used only by applicators certified and/or licensed by the Board as provided in Chapters 31 and 32.

2. Prohibited and Limited Use Pesticides

A. The chemical insecticides commonly known as aldrin, chlordane, DDD, DDT, dieldrin, endrin, fluoracetamide (Compound 1081), heptachlor, lindane, microencapsulated formulations of methyl parathion, sodium monofluoracetate (Compound 1080), thallium salts, toxaphene, trichlorfon and daminozide (Alar-85, except for B-Nine which is only restricted)* are classified as limited use pesticides. *(Emergency rule expires 90 days after adoption)

B. An application to use any limited use pesticides shall be made to the Board in writing on such forms as may be provided by the Board. Applications shall include, at

a minimum, the chemical to be used, the pest or pests which are the target of such chemical application, the vegetation to which it will be applied, the location and detailed description of the application site, and the amount of land to be covered by such application. When, in the opinion of the Board, any bona fide emergency prevents a written application to the Board, such application may be made orally to any member or employee of the Board. Failure of any applicator to exercise due diligence or to reasonably anticipate any situation which would create the need for the use of any limited use pesticide shall not be considered an emergency within the scope of this section.

C. The Board may grant such applicant permission to use or apply any limited use pesticide if the Board determines that (1) an unusually heavy infestation of insects or other pests creates the prospect of a significant economic loss to the applicant or any other person or creates a public health hazard, (2) no suitable chemical, biological or other method is available to prevent or reduce the impact of such infestation to an acceptable level, (3) the use of such limited use pesticide will not create an undue risk to human life nor cause significant detrimental effects upon the environment, and (4) such use is in compliance with FIFRA and the rules and regulations promulgated thereunder. Permission to use such limited use pesticide may be granted upon such reasonable terms and conditions as the Board deems necessary to protect the health, safety and general welfare of the environment and the people of the State of Maine and to achieve the purpose of the statute. Permission to use any limited use pesticide during any bona fide emergency situation may be granted upon the oral consent of a majority of the Board given to the director or chairman of the Board or such other member of the Board who received the oral application. Such oral consent shall thereafter be confirmed in writing by such members to the director within ten (10) days.

D. Exemptions. Any other regulation to the contrary notwithstanding, the use of

livestock dips, sprays and rubbing devices containing or impregnated with toxaphene is hereby permitted without permission of the Board, provided such use is consistent with regulations of the U.S. Environmental Protection Agency.

E. The outdoor use or application of benzene hexachloride (including lindane) for the purpose of controlling mosquitoes and other biting flies is hereby prohibited in the State of Maine on or after September 1, 1970.

AUTHORITY: Title 22 M.R.S.A., Chapter 258-A and 7 M.R.S.A., Chapter 103

EFFECTIVE DATE: July 6, 1979

AMENDMENT EFFECTIVE: December 8, 1985
June 22, 1986
May 8, 1988
June 14, 1989
June 20, 1989

Chapter 41

SPECIAL RESTRICTIONS ON PESTICIDE USE

ALDICARB (TEMIK)

SUMMARY: This subchapter describes limitations placed upon the use of aldicarb (Temik 15G) in proximity to potable water bodies in the State of Maine.

The registration of aldicarb (Temik 15G) is subject to the following regulations:

1. Application

The registration of aldicarb (Temik 15G) is subject to the following buffer zone requirements:

A. Aldicarb (Temik 15G) shall not be applied within 50 feet of any potable water source if that water source has been tested and found to have an aldicarb concentration in the range of one to ten parts per billion (ppb). The 50 foot buffer would be mandatory for one year with a required retesting of the water at the end of the period.

B. Aldicarb (Temik 15G) shall not be applied within 100 feet of any potable water source if that water source has been tested and found to have an aldicarb concentration in excess of 10 ppb. The 100 foot buffer would be mandatory for one year with a required retesting of the water at the end of this period.

AUTHORITY: 5 M.R.S.A. § 8051 et. seq.; 7 M.R.S.A. §§ 601-610.

EFFECTIVE DATE: January 2, 1984

Chapter 41

SPECIAL RESTRICTIONS ON PESTICIDE USE

CAPTAN

REPEALED: August 5, 1990

TRICHLORFON (DYLOX)

SUMMARY: This subchapter describes limitations placed upon the use of trichlorfon (Dylox) in the State of Maine.

The registration of trichlorfon (Dylox) is subject to the following regulations:

1. Definitions

- A. **Air Blast Sprayer.** Air blast sprayer means a spray unit utilizing a fan-driven air stream to break the nozzle output into fine drops which move with the air stream toward the target.
- B. **Application Site.** Application site means the geographic area where pest control is intended and where placement for effect of a pesticide is to occur.

2. Limited Use List

Any formulation containing trichlorfon (Dylox) is classified as a limited use pesticide.

3. Notice

Any person who applies trichlorfon (Dylox) by aircraft or air blast sprayer or who contracts or arranges for such applications of trichlorfon (Dylox) shall provide notice in conformity with this regulation.

A. Notice shall be given to:

- 1. All persons who maintain a home or fruit or vegetable garden on property which abuts the application site; or
- 2. To the public.

B. Notice pursuant to A(1) shall be given in writing at least twenty-four (24) hours and not more than two months prior to application.

C. Notice pursuant to A(2) shall be given by publication in a newspaper of general circulation in the area of the state affected at least twenty-four (24) hours and not more than two months prior to application.

D. Notice shall be in the form provided by the Board and will contain at minimum:

- 1. The name of the chemical to be applied;
- 2. The boundaries of the application site;

3. The name and address of the person supplying notice;
4. Any medical or environmental warnings contained on the product labeling plus, if it is not already included on the label, a sentence stating that the compound has demonstrated some mutagenic effects in bacterial cell cultures; and
5. Instructions directing those persons notified to contact the person supplying notice if they wish to obtain information regarding precise time of application.

E. Arrangements for more specific notice pursuant to Section D(5) shall be made by the individual parties involved.

4. Permits

A permit to use such limited use pesticide may be issued by the Board when it finds that the criteria of Chapter 40, Section 2(c) are satisfied. The Board may impose reasonable conditions on such permits as it deems necessary to protect the health, safety and general welfare of the environment and the people of the State of Maine. Conditions may include, without limitation, requirements for demonstrating that the pest infestation will cause substantial economic harm if it goes untreated by the limited use pesticide, for posting areas to be treated and for observing no-spray buffers.

AUTHORITY: 5 M.R.S.A., § 8051 et seq.; 7 M.R.S.A. §§ 601-610; 22

M.R.S.A. §§ 1471-A, 1471-B, 1471-C, 1471-D, 1471-M.

EFFECTIVE DATE: May 7, 1981

AMENDMENT EFFECTIVE: May 8, 1988

Chapter 50

REPORTING REQUIREMENTS

SUMMARY: These regulations describe the types of information which commercial applicators, private applicators, licensed dealers, spray contracting firms and monitors must maintain and submit to the Board.

1. Reports by Commercial Applicators

A. Indoor pesticide applications shall be recorded as provided in subsection D and such records kept by the licensee for a period of at least two years. Such records are to be kept current and are to be available for inspection by representatives of the Board at reasonable times, upon request.

B. Outdoor pesticide applications made by governmental agencies to property owned or controlled by such agencies shall be recorded as provided in subsection D, and a report on such usage submitted to the Board on an annual basis.

C. Outdoor commercial pesticide applications other than those described in subsection B shall be recorded as provided in subsection D and such records shall be kept by the licensee for a period of two years. Such records are to be kept current and are to be available for inspection by representatives of the Board at reasonable times, upon request. In addition, quarterly summary reports shall be filed with the Board by or on behalf of applicators by the fifteenth day of April, July, October and January, containing the following information for each type of pest to be controlled: pest name and quantity of each pesticide used, total area treated for each pesticide and method of application for each pesticide.

D. For the purposes of subsections A, B and C, the following information shall be recorded for all applications:

1. Application date(s); Town and location where applied; Spray applicator firm; Name of licensed applicator performing the application; Name of spotter/monitor if required; Name of customer; Size of area (acres, road mileage, number of trees etc.).

2. Pesticide applied; Target organism; Volume applied (undiluted); Dilution agent and ratio; Method of application; Rate of application; Disposition of unused material and empty containers.

3. For outdoor applications, the weather conditions for the general area at the start and end of the spray period and at any point during application when there is a change in weather conditions which may significantly affect the potential for pesticide drift. Conditions to be recorded shall include wind speed, wind direction and air temperature which may be determined by use of hand held or other simple

equipment or reasonably reliable method. Sky conditions shall also be recorded by visual observations, as sunny, partly cloudy, overcast, foggy or rainy. Applicators making injections, treating stumps, applying granules and using nozzles creating coarse spray which is composed of droplets greater than 500 microns in size in ground applications are exempt from this subsection 3.

4. Description of any spray incident which is to be reported under section 2 below.
5. Signature of person recording the data.

2. Spray Incident Reports

A. Private applicators, commercial applicators, spray contracting firms and licensed dealers shall be responsible for telephoning a spray incident report to the Board as soon as practicable after emergency health care has been obtained for injured parties and efforts have been initiated to contain any spills.

B. A reportable spray incident is any significant misapplication or accidental discharge of a pesticide. Such incidents shall include: fires involving pesticides; vehicle and aircraft accidents resulting in a spill or human contamination; failure to turn off spray booms or other spray equipment resulting in application to sensitive areas (such as water bodies, or places of human habitation) when such application is a violation of label instructions or other law; overfilling of spray equipment resulting in risk of contamination of water; and any other equipment breakage or malfunction or pesticide handling activity which causes a pesticide release which may result in a threat to human health or the environment.

3. Spray Period Reports for Major Forest Insect Aerial Spray Programs

A. Each monitor employed on a major public or private forest insect aerial spray application program shall prepare a written spray period report describing each spray period.

B. The spray period report shall include the following information: Date and time of the spray period; Area actually sprayed; Pesticide used; Weather conditions before, during and immediately after spraying; Spray behavior, including visible drift to nontarget areas; and Notation of any reason why a spray period was terminated prior to completion of area. The report shall also include a map showing any nontarget areas that were sprayed.

C. The spray period report shall be made available for inspection by representatives of the Board as soon as practicable following the close of each spray period and, in any event, before the next spray period and before the end of the day. The spray reports shall be maintained on file and available for inspection by representatives of the Board for a period of at least two years.

4. Sales

A. Licensed dealers shall maintain records of each sale of a restricted use pesticide on their sales slips and the customer's certification number should be recorded on at least one of the sales slips involving that individual. These records are to be available for inspection by representatives of the Board at reasonable times, upon request, and are to be maintained for two calendar years.

B. Information to be required on dealer records shall include signature of purchaser or his agent, chemical purchased, quantity purchased, date of purchase, and such other information as may be deemed necessary by the Board.

C. Any dealer who discontinues the sales of restricted or limited-use pesticides shall notify the Board in writing and shall provide the Board, upon request, with all required records.

D. Dealers selling restricted or limited-use pesticides must provide the Board with a calendar, year-end report of total sales of each restricted or limited-use pesticide before their dealer license can be renewed. The Board will furnish report forms or the dealer may submit the records on his own forms.

E. Dealers must also maintain a copy of the affidavit which is provided to the purchaser of a restricted-use or limited-use pesticide as specified in Chapter 21 of these regulations. Upon the return of the completed original affidavit, the dealer must hold it for three years or forward it to the Board.

AUTHORITY: Title 22 M.R.S.A., Chapter 258-A 1471-G, M and R

EFFECTIVE DATE: August 12, 1985

Chapter 51

NOTICE OF FOREST INSECT AERIAL SPRAY APPLICATION

SUMMARY: These regulations are to insure provision of notice to the public and the Board of any forest insect aerial spray application.

1. Definitions

A. **Major Forest Insect Aerial Spray Application. (Major Application)** Major forest insect aerial spray application means a project to apply pesticides against a forest insect pest by aerial application over an area containing at least 1,000 acres in the aggregate.

B. **Minor Forest Insect Aerial Spray Application. (Minor Application)** Minor forest insect aerial spray application means a project to apply pesticides against a forest insect pest by aerial application over an area containing less than 1,000 acres in the aggregate.

2. Newspaper Notices

A. A notice of a major application shall be published in a newspaper of general circulation in the area affected at least 14 days but not more than 30 days prior to commencement of planned spray activity.

B. A notice of a minor application shall be published in a newspaper of general circulation in the area affected at least 4 days but not more than 10 days prior to commencement of planned spray activity.

C. All newspaper notices shall include the following information:

name of landowner or his representative who contracts for the

application; township, or in the case of municipalities, town

and public road location of property on which spraying will take place; pesticide(s) to be used; date or reasonable range

of dates on which spraying is proposed to take place; any pertinent precautions for the persons who are accidentally sprayed; name, address and telephone number of persons responsible for the activity from whom more specific information regarding spray areas and times may be obtained; telephone number of the Board of Pesticides Control and the telephone number of the Poison Control Center.

D. Any addition of spray areas not specified in the original newspaper notice and any change from the insecticides specified in the original notice shall be published in the same newspaper at least 24 hours before the change is effected.

3. Posting of Areas Subject to Major and Minor Applications

A. A notice in the form of a poster shall be conspicuously posted at least one week prior to planned spray activity and shall remain in place at least one week after spray activity ceases. Areas that shall be posted include each major point of ingress and egress of the public into the area to be sprayed. Major points of ingress and egress include federal, state, municipal and private roads open to the public and known to be used by the public that lead into the area to be sprayed; known boat launching sites on rivers leading through spray areas and within the boundaries of the land owned by the person authorizing the spray activity; and marked points of access to foot trails known to be used by the public.

B. Poster shall be constructed of brightly colored, weather resistant stock and shall be at least 12 x 15 inches in size. It shall contain the same information that is required for the newspaper notice under Section 2.C of this Chapter. In areas where French Canadians are known to work or travel, the information shall be printed in both English and French.

4. Notice to the Board and Poison Control Center

A. A written notice shall be given to the Board and a copy forwarded to the Poison Control Center according to the following schedule:

1. Written notice of a major application shall be given to the Board at least 15 days but not more than 30 days prior to the commencement of planned spray activity.
2. Written notice of a minor application shall be given to the Board at least 5 days prior to the commencement of planned spray activity.
3. Any addition of spray blocks not specified in the original notice to the Board and any change in pesticide assignments to particular blocks shall be given to the Board as soon as practicable, and in any case every reasonable effort shall be made to give notice of change to the Board prior to initiation of pesticide application. Notice under this subsection may be accomplished by telephone communication with the Board's field office.

B. All notices shall be prepared on forms provided by the Board and shall consist of:

1. A description of the proposed spray activity including detailed spray application maps showing: pesticide(s) proposed to be used; sensitive areas shown on available spray application maps; and major public routes of ingress and egress.
2. The date or dates on which spraying is proposed to take place.

3. A description of the delivery mechanism which shall include:
 - a. The name, address, telephone number and license number of the spray contracting firm which will carry out the spray activity.
 - b. A summary of the aircraft; base and support crew including monitors, spotters and applicators; airport storage and mixing facilities; and maintenance persons.
4. Pesticide(s) to be used, dilution agent(s), ratio(s) and notation of any experimental applications.
5. A listing of precautions taken to insure notice to the public, including copies of the newspaper notice and the poster to be used.
6. The name, address and telephone number of a contact person who will be reasonably accessible by telephone and who will make reasonably current and detailed information about the project available to the Board promptly upon request.

5. Responsibility for Notices

- A. In the event of a forest insect spray program administered pursuant to Title 12, Chapter 801, the Bureau of Forestry is responsible for notices.
- B. In the case of any other forest insect aerial spray activity, responsibility for notices lies with the landowner, his representative or if the land is leased, with the lessee.

AUTHORITY: 22 M.R.S.A. 1471-G, M and R

EFFECTIVE DATE: August 12, 1985

REVISIONS TO CHAPTER 60
DESIGNATION OF CRITICAL PESTICIDE CONTROL AREAS

SUMMARY: These regulations establish criteria which the Board will use in deciding if an area should be designated as a critical pesticide control area. In addition, these regulations specify the procedures parties must follow in requesting such a designation. These regulations also define the locations that have been designated as critical areas by the Board.

CHAPTER 60
DESIGNATION OF CRITICAL PESTICIDE CONTROL AREAS

1. Procedure

A. The Board shall receive, consider and act upon petitions for designation of critical pesticide control areas in accordance with 5 M.R.S.A., Ch. 375, subchapter II. Citizen petitions shall be allowed in accordance with 5 M.R.S.A. § 8055. A municipality or county may make such petition in accordance with 22 M.R.S.A. § 1471-M, sub-§ 4. In addition, the Board's staff may initiate such a petition.

B. The Board shall provide public notice and opportunity for public comment on any such petition in accordance with 5 M.R.S.A., Ch. 375, subchapter II.

C. There shall be opportunity for local participation in Board decisions regarding the designation of critical areas, as provided by 22 M.R.S.A. § 1471-V.

2. Information required in Petition

Any person or persons petitioning the Board to designate an area as a critical pesticide control area shall submit the following information in support of the petition:

A. The name, address and telephone number of the petitioner(s) and a statement of the petitioner's interest in the proposed designation.

B. The name of the pesticides or group of pesticides for which restrictions are sought. Petitioners may seek restrictions on specific formulations which have enhanced toxicity, rather than on all products containing the active ingredient. For purposes of this regulation, pesticides shall include both active and inert ingredients, and carriers used in any pesticide application.

C. The name(s) and address(es) of the owner(s) of property within the proposed critical area.

D. A map of the proposed critical area.

E. A description of the purposes for which the pesticide(s) is or may be applied within the proposed area (if known).

F. For petitions for designation under criteria of sections 3(A), 3(B) or 3(C), the name(s) of the species for which protection is sought and a summary of the data establishing adverse effects of pesticides upon the species.

G. For petitions for designation under criteria of section 3(D), a copy of any applicable town ordinances, a summary of: evidence establishing that the pesticides may enter ground or surface water, hydrogeologic data which adequately defines the proposed critical area, and evidence establishing that the pesticide(s) may have an adverse effect upon the health of current or future users of the ground or surface water.

H. For petitions for designation under criteria of section 3(E), a summary of medical and/or epidemiological evidence that exposure to the pesticide(s) causes serious and/or longstanding health effects to sensitive individuals or groups of individuals.

I. For petitions for designation under criteria of sections 3(F) or 3(G), a copy of any management plan for the area or species.

J. A description of the petitioner's proposed restrictions on the use of pesticide(s) within the proposed critical area.

3. Criteria for designation

The Board of Pesticides Control will use the following criteria to determine whether to designate a critical pesticide control area. Where the Board is persuaded by the evidence that any of these criteria are met, it may designate a critical pesticide control area and adopt additional pesticide use restrictions, prohibitions or management plans for that area as necessary to protect health, welfare and the environment.

A. Areas where use of pesticide(s), without additional restrictions, is likely to cause the significant destruction or curtailment of the habitat or range of any animal or plant species that:

- (1) is listed as endangered pursuant to state or federal law; or
- (2) is listed as threatened pursuant to state or federal law; or
- (3) is an invertebrate species ranked G1, G2 or S1 under the Natural Heritage Program of The Nature Conservancy and which is, in the Board's judgment, of natural significance.

B. Areas where use of pesticide(s), without additional restrictions, is likely to negatively affect the mortality rate and/or reproductive capability of any animal or plant species that:

- (1) is listed as endangered pursuant to state or federal law; or
- (2) is listed as threatened pursuant to state or federal law; or
- (3) is an invertebrate species ranked G1, G2 or S1 under the Natural Heritage Program of The Nature Conservancy and which is, in the Board's judgment, of natural significance.

C. Areas where use of pesticide(s), without additional restrictions, is likely to cause the significant destruction or curtailment of significant wildlife habitat. "Significant wildlife habitat" is as identified under the Natural Resources Protection Act, 38 M.R.S.A., Ch. 3, subchapter 1, Art. 5-A.

D. Areas where use of pesticide(s), without additional restrictions, is likely to significantly risk the quality of surface or groundwater supplies used for human consumption.

E. Areas where use of pesticide(s), without additional restrictions, is likely to cause serious and/or longstanding impairment of the health of sensitive individuals or groups of individuals who normally occupy such areas. The Board contemplates that this designation will require verified medical and/or epidemiological documentation of human sensitivity to one or more pesticides.

F. Areas where use of pesticide(s), without additional restrictions, is likely to significantly harm natural or other resources owned or managed by a government agency, or is contrary to the duly adopted management plan for an area owned or managed by a government agency.

G. Areas where use of pesticide(s), without additional restrictions, is likely to significantly harm natural resources within an area which is identified as an exemplary natural community or ecosystem of recognized exceptional qualities and has been designated for long-term ecological research and/or conservation purposes.

4. Designated Critical Pesticide Control Area

A. Deblois Fish Hatchery Critical Pesticide Control Area

(1) Facts and policies

- (a) A fish cultural facility owned and operated by the Maine Department of Inland Fisheries and Wildlife exists in the Town of Deblois, Washington County, Maine.

(b) The purpose of the above facility is to hatch and propagate salmonid fishes for distribution and stocking in public waters throughout the State of Maine.

(c) The above hatchery and rearing pools are surrounded by extensive areas of land devoted to the commercial culture of lowbush blueberries.

(d) The above blueberry land has historically been sprayed with insecticides on a regular basis, for the purpose of controlling maggots of the blueberry fruit fly.

(e) Aerial application of pesticides for the above purpose has on at least one occasion resulted in the mortality of large numbers of fish in the State fish-cultural facility.

(f) The State's plan for management of the Deblois fish-cultural facility calls for continued use in production of salmonid fish for stocking Maine waters. In that light, the facility and its tributary water supplies represents critical wildlife habitat.

(g) The State's plan and the critical habitat necessary for continued operation are threatened by aerial application of pesticides in the surrounding area.

(h) It is in the public interest to restrict application of pesticides in the vicinity of the Deblois fish-cultural facility.

(2) Location.

The Deblois Critical Area shall encompass the area within one thousand feet of the fish-cultural facilities owned by the Department of Inland Fisheries and Wildlife in Deblois, and of the tributary water supplies to said facilities. The above fish-cultural facilities are sited on two parcels of land in the eastern portion of the Town of Deblois, Washington County, Maine, as follows:

(a) The hatchery parcel, so-called, located on Hatchery Brook, so-called, an officially un-named tributary to Bog Stream, at 45°45'0" Latitude and 67°56'10" Longitude.

(b) The rearing pool parcel, so-called, located on Bog Stream at 44°44'30" Latitude and 67°56'0" Longitude.

(3) Conditions.

Within the Deblois Critical Area, the following restrictions are to be in effect:

- (a) No one shall carry out pesticide applications on property of the Maine Department of Inland Fisheries and Wildlife, except for employees of the Department engaged in normal fish cultural and household activities.
- (b) No one shall make aerial applications within the Deblois Critical Area as designated under "Location".
- (c) On private blueberry lands located within the Deblois Critical Area, the only insecticidal application shall consist of carbaryl (Sevin) applied by ground equipment at rates not exceeding those recommended by the Maine Cooperative Extension Service.
- (d) Prior to each insecticide application referred to in (c) above, the firm of Jasper Wyman and Son, Milbridge, Maine, shall notify personnel of the Deblois fish-cultural facility.

B. Dennys River Critical Pesticide Control Area

(1) The above entitled matter having come up for public hearing on 7 March, 1978, at 2:00 P.M. before the Pesticides Control Board in Room 102 of the Science Building at the University of Maine in Machias; and the Board, having considered the evidence and arguments presented, and with a quorum present, has this day voted to declare a critical area under provisions of Title 22, Chapter 258-A, Sections 1471-F and 1471-M (2)(A), within which critical area no aerial application of pesticide is to be made without prior approval of the Board of Pesticides Control.

(2) The critical area herein established is described as follows: Commencing at the dam at the foot of Meddybemps Lake and extending down the Dennys River to the Gilman Dam, so-called, the critical area shall include all land within one-half mile of either bank of the Dennys River; commencing at the Gilman Dam, so-called, and extending down the Dennys River to its entrance into Dennys Bay, so-called, the critical area shall include all land within one mile of either bank of the Dennys River.

AUTHORITY: 22 M.R.S.A., chapter 258-A.

EFFECTIVE DATE: July 6, 1979

REVISION EFFECTIVE: May 8, 1989

Chapter 70

ADJUDICATORY PROCEEDINGS

SUMMARY: These regulations describe procedures the Board must follow in conducting hearings concerned with pesticide certification, licenses and permits.

1. Purpose

These rules are in conformance with the Administrative Procedures Act as promulgated pursuant to 5 M.R.S.A. § 8051 and the Pesticides Control Board Law 22 M.R.S.A. § 1471-A et seq.

2. Applicability

A. These rules apply to proceedings when the Board considers the following:

1. The application of pesticides in a critical area described pursuant to 22 M.R.S.A. § 1471-M(2)(A), when a rule establishing the critical area so provides;
2. The application of pesticides to a water body pursuant to 22 M.R.S.A. § 1471-E;
3. The renewal of a previously issued certification, license or permit provided for in 22 M.R.S.A. § 1471-D, 1471-N, unless the certification, license or permit is renewed by other action of the Board;
4. The amendment or modification of a certification, license or permit provided for in 22 M.R.S.A. § 1471-D, 1471-N;
5. The continuation of a temporary suspension of a license, certification or permit pursuant to 22 M.R.S.A. § 1471-D(7)(C).

3. Application to Apply Pesticides to a Critical Area or Water Body

- A. A written application for permission to apply a pesticide under 22 M.R.S.A. § 1471-M(2)(A) or 1471-E shall be addressed to the Director, Pesticides Control Board, Department of Agriculture, Augusta, Maine, 04333.
- B. Such application shall contain such information as is requested by the Board.

4. Notice of Right to Hearing

A. Upon receipt of an application or otherwise when the Board's action is covered by these rules, the Board shall give notice to:

1. The person or persons whose legal rights, duties or privileges are at issue, by regular mail, sufficiently in advance of the anticipated time of the decision to afford an adequate opportunity to prepare and submit evidence and argument, and to request a hearing if so desired; and
2. The general public, in any proceeding deemed by the Board to involve the determination of issues of substantial public interest, such notice to be given sufficiently in advance of the anticipated time of the decision to afford interested persons an adequate opportunity to prepare and submit evidence and argument, and to request a hearing if so desired.

B. This section is complied with if notice is given as provided in 6 of these regulations.

5. Hearings

- A. Upon request. A hearing shall be held upon receipt of a request by a person whose legal rights, duties or privileges are at issue under these rules. Failure by such person to request a hearing within 15 days of receipt of notice as provided in 4 shall be deemed a waiver of the right to a hearing.
- B. Board's discretion. A hearing may be held, at the Board's discretion, in any proceedings deemed by the Board to involve issues of substantial public interest.

6. Notice of Public Hearing

A. When a hearing is to be held, notice shall be given as follows:

1. To the person or persons whose legal rights, duties or privileges are at issue, by regular mail, sufficiently in advance of the hearing date to afford an adequate opportunity to prepare and submit evidence and argument; and
2. In any proceeding deemed by the agency to involve the determination of issues of substantial public interest, to the public sufficiently in advance of the hearing date to afford interested persons an adequate opportunity to prepare and submit evidence and argument and to petition to intervene.

7. Notice to the Public of a Hearing

A. Notice to the public. Notice to the public shall be given:

1. By publication, at least twice in a newspaper of general circulation in the area of the state affected;

2. By publication in any other trade, industry, professional or interest group publication which the agency deems effective in reaching persons who would be entitled to intervene as of right under section 12 of these regulations.
3. In any other manner deemed appropriate by the Board.

8. Notice

Notice shall consist of:

1. A statement of the legal authority and jurisdiction under which the proceeding is being conducted;
2. A reference to the particular substantive statutory and rule provisions involved;
3. A short and plain statement of the nature and purpose of the proceeding and of the matter asserted;
4. A statement of the time and place of the hearing, or the time within which a hearing may be requested;
5. A statement of the manner and time within which evidence and argument may be submitted to the Board for consideration, whether or not a hearing has been set; and
6. When a hearing has been set, a statement of the manner and time within which applications for intervention may be filed.

9. Presiding Officer

- A. Presiding officer. The Board may authorize any agency member, employee or agent to act as presiding officer in any hearing.
- B. Substitute officer. Whenever a presiding officer is disqualified or it becomes impracticable for him to continue the hearing, another presiding officer may be assigned to continue with the hearing; provided that, if it is shown that substantial prejudice to any party will thereby result, the substitute officer shall commence the hearing anew.
- C. Presiding officer; duties. Presiding officers may:
 1. Administer oaths and affirmations;
 2. Rule on the admissibility of evidence;

3. Regulate the course of the hearing, set the time and place for continued hearings, and fix the time for filing of evidence, briefs and other written submissions; and
 4. Take other action authorized by statute or agency rule consistent with 5 M.R.S.A., Chapter 375, subchapter IV.
- D. Report. In the event that the presiding officer prepares any report or proposed findings for the Board, the report or findings shall be in writing. A copy of the report or findings shall be provided to each party and an opportunity shall be provided for response or exceptions to be filed by each party.

10. Bias of Presiding Officer or Board Member

- A. Hearings; impartial. Hearings shall be conducted in an impartial manner. Upon the filing in good faith by a party of a timely charge of bias or of personal or financial interest, direct or indirect, of a presiding officer or Board member in the proceeding requesting that that person disqualify himself, that person shall determine the matter as a part of the record.
- B. Counsel. Notwithstanding 1, the person involved may consult with private counsel concerning the charge.

11. Disposition without Full Hearing

- A. Stipulation, settlement, consent order. The Board may make informal disposition of any adjudicatory proceeding by stipulation, agreed settlement or consent order.
- B. Default. The Board may make informal disposition of any adjudicatory proceeding by default, provided that notice has been given that failure to take required action may result in default, and further provided that any such default may be set aside by the Board for good cause shown.
- C. Issues limited. The Board may limit the issues to be heard or vary any procedure prescribed by these rules or 5 M.R.S.A. Chapter 375, subchapter IV if the parties and the Board agree to such limitation or variation, or if no prejudice to any party will result.

12. Intervention As of Right

- A. Any person showing that he is or may be a member of a class which is or may be substantially and directly affected by the proceedings, or any other agency of federal, state or local government which is or may be substantially and directly affected, shall be allowed to intervene as a party to the proceedings.
- B. Intervention; interested person. The Board may, by order, allow any other

interested person to intervene and participate as a full or limited party to the proceeding. This subsection shall not be construed to limit public participation in the proceeding in any other capacity.

- C. Application. Application for intervention shall be received by the Director no later than five days before the commencement of the hearing, except for good cause shown. The application shall state the interest of the person or class and the reason it wishes to intervene. A copy of the application shall be sent by regular mail to the person or persons whose legal rights, duties or privileges are at issue.
- D. Decision. The Board shall either grant or deny the application at the time of the hearing, unless all parties agree to an earlier decision.
- E. Participation limited or denied. When participation of any person is limited or denied, the Board shall include in the record an entry to that effect and the reasons therefor.
- F. Consolidation of presentations. Where appropriate, the Board may require consolidation of presentations of evidence and argument by members of a class entitled to intervene under subsection (A) of these regulations, or by persons allowed to intervene under subsection (B).
- G. Participation. The Board shall allow any of its staff to appear and participate in any adjudicatory proceeding.

13. Ex Parte Communications; Separation of Functions

- A. Communication prohibited. In any adjudicatory proceeding, no Board members authorized to take final action or presiding officers designated by the Board to make findings of fact and conclusions of law shall communicate, directly or indirectly, in connection with any issue of fact, law or procedure, with any person, except upon notice and opportunity for all parties to participate.
- B. Communication permitted. This section shall not prohibit any Board member or other presiding officer described in subsection (A) from:
 - 1. Communicating in any respect with other members of the Board or other presiding officers; or
 - 2. Having the aid or advice of those members of his own Board staff, counsel or consultants retained by the Board who have not participated and will not participate in the Board proceeding in an advocate capacity.

14. Opportunity to be Heard

- A. Opportunity for hearing. The opportunity for hearing in an adjudicatory

proceeding shall be afforded without undue delay.

- B. Rights. Unless limited by stipulation under 11(C) or by Board order pursuant to 12(B) or 12(F) or unless otherwise limited by the Board to prevent repetition or unreasonable delay in proceedings, every party shall have the right to present evidence and arguments on all issues, and at any hearing to call and examine witnesses and to make oral cross-examination of any person present and testifying.

15. Evidence

- A. Rules of privilege. The Board need not observe the rules of evidence observed by courts, but shall observe the rules of privilege recognized by law.
- B. Evidence. Evidence shall be admitted if it is the kind of evidence upon which reasonable persons are accustomed to rely in the conduct of serious affairs. The Board may exclude irrelevant or unduly repetitious evidence.
- C. Witnesses. All witnesses shall be sworn.
- D. Prefiling testimony. Subject to these requirements, the Board may, for the purposes of expediting adjudicatory proceedings, require procedures for the prefiling of all or part of the testimony of any witness in written form. Every such witness shall be subject to oral cross-examination.
- E. Written evidence; exception. No sworn written evidence shall be admitted unless the author is available for cross-examination or subject to subpoena, except for good cause shown.

16. Official Notice

- A. Official notice. The Board may take official notice of any facts of which judicial notice could be taken, and in addition may take official notice of general, technical or scientific matters within their specialized knowledge and of statutes, regulations and nonconfidential agency records. Parties shall be notified of the material so noticed, and they shall be afforded an opportunity to contest the substance or materiality of the facts noticed.
- B. Facts. Facts officially noticed shall be included and indicated as such in the record.
- C. Evaluation of evidence. Notwithstanding the foregoing, the Board may utilize their experience, technical competence and specialized knowledge in the evaluation of the evidence presented to them.

17. Record

A. Record. In an adjudicatory proceeding, the Board shall make a record consisting of:

1. All applications, pleadings, motions, preliminary and interlocutory rulings and orders;
2. Evidence received or considered;
3. A statement of facts officially noticed;
4. Offers of proof, objections and rulings thereon;
5. Proposed findings and exceptions, if any;
6. The recommended decision, opinion or report, if any, by the presiding officer;
7. The decision of the Board; and
8. All staff memoranda submitted to the members of the Board or other presiding officers by Board staff in connection with their consideration of the case, except memoranda of counsel to the Board.

B. Hearings recorded. The Board shall record all hearings in a form susceptible to transcription. Portions of the record as required and specified in subsection A may be included in the recording. The Board shall transcribe the recording when necessary for the prosecution of an appeal.

C. Record; copies. The Board shall make a copy of the record, including recordings made pursuant to subsection B available at its principal place of operation, for inspection by any person during normal business hours; and shall make copies of the record, copies of recordings or transcriptions of recordings available to any person at actual cost. Notwithstanding the provisions of this subsection, the Board shall withhold, obliterate or otherwise prevent the dissemination of any portions of the record which are made confidential by state or federal statute, but shall do so in the least restrictive manner feasible.

D. Decision on the record. All material, including records, reports and documents in the possession of the Board, of which it desires to avail itself as evidence in making a decision, shall be offered and made a part of the record and no other factual information or evidence shall be considered in rendering a decision.

E. Documentary evidence. Documentary evidence may be incorporated in the record by reference when the materials so incorporated are made available for examination by the parties before being received in evidence.

18. Subpoena and discovery

- A. Any party may request the issuance of a subpoena by the Board, and the Board may issue the same if it first obtains the approval of the Attorney General or of any deputy attorney general. Such approval shall be given when the testimony or evidence sought is relevant to any issue of fact in the proceeding.
- B. When properly authorized, subpoenas may be issued by the Board or by any person designated by the Board for that purpose, in accordance with the following provisions:
 - 1. The form shall be similar to that used in civil cases before the courts. Witnesses shall be subpoenaed only within the territorial limits and in the same manner as witnesses in civil cases before the courts, unless another territory or manner is provided by law. Witnesses subpoenaed shall be paid the same fees for attendance and travel as in civil cases before the courts. Such fees shall be paid by the party requesting the subpoena.
 - 2. Any subpoena issued shall show on its face the name and address of the party at whose request it was issued.
 - 3. Any witness subpoenaed may petition the Board to vacate or modify a subpoena issued in its name. The Board shall give prompt notice to the party who requested issuance of the subpoena. After such investigation as the Board considers appropriate, it may grant the petition in whole or in part upon a finding that the testimony or the evidence whose production is required does not relate with reasonable directness to any matter in question, or that a subpoena for the attendance of a witness or the production of evidence is unreasonable or oppressive or has not been issued a reasonable period in advance of the time when evidence is requested.
 - 4. Failure to comply with a subpoena lawfully issued in the name of the Board and not revoked or modified by the Board as provided in this section shall be punishable by a fine of not less than \$500 and not more than \$5,000, or by imprisonment not to exceed 30 days, or both.

19. Decisions: Appeal

- A. Every Board decision made at the conclusion of an adjudicatory proceeding shall be in writing or stated in the record, and shall include findings of fact sufficient to apprise the parties and any interested member of the public of the basis for the decision. The Board shall maintain a record of the vote of each member of the Board with respect to the Board's decision. A copy of the decision shall be delivered or promptly mailed to each party to the proceeding or his representative of record.

- B. The Board shall inform the parties at the time the decision is delivered or mailed that they have the right to have the Superior Court review the decision and that a petition for review of the decision must be filed in the Superior Court within 30 days after receipt of notice of the decision pursuant to 5 M.R.S.A. § 11002.

AUTHORITY: 22 M.R.S.A., Chapter 258-A

EFFECTIVE DATE: July 6, 1979

Chapter 90

COMPLAINTS

SUMMARY: These regulations describe the procedure a person must follow in bringing a complaint to the Board and outline the steps the Board may take in response.

1. Purpose

The purpose of this section is to provide a formal procedure which assures that the Board of Pesticides Control will consider all complaints regarding uses of pesticides.

2. Complaint

Any person, individual, corporation, unincorporated association, group of individuals or government agency may submit a complaint regarding any person, known or unknown, relative to the use of pesticides.

3. Address to Director

All complaints shall be sent to the Director, Board of Pesticides Control, Department of Agriculture, Augusta, Maine 04333. The Director may, at his discretion, investigate the complaint prior to Board action.

4. Placed on Board's Agenda

The complaint shall be placed on the Board's agenda, the Board shall give reasonable notice to the complainant, the person who is the subject of the complaint, if known, and any other party the Director believes is interested in the complaint.

5. Considered

The Board shall consider the complaint along with any information which the Director may have available, and take whatever action it deems necessary to protect the public's interest. Action could include taking no action, requesting the Board's staff to investigate the complaint, scheduling an informal hearing between the affected parties or instituting formal adjudicatory proceedings. Any such consideration shall not constitute an adjudicatory proceeding within the meaning of chapter 70 of the Board's regulations.

AUTHORITY: 22 M.R.S.A., Chapter 258-A

EFFECTIVE DATE: July 6, 1979