

SV  
975  
A1  
C6

THE

CONN.

CLIPPINGS



LIBRARY SERIALS  
OCT 22 1974  
MICHIGAN STATE UNIVERSITY LIBRARIES

OCTOBER 1974

VOL. 7 No. 3

### NOTICE OF INTENT TO ADOPT PESTICIDE REGULATIONS

The Commissioner of Environmental Protection pursuant to Sections 4-168 and 22a-6 of the Connecticut General Statutes and Public Act 73-540 hereby gives notice of his intention to adopt regulations regarding pesticides. These regulations are proposed under the authority of Section 22a-5, Connecticut General Statutes, and Section 5 and 21 of Public Act 73-540.

All interested persons are invited to express their views and arguments on these proposed regulations at a public hearing to be held at the Judiciary Room, State Capitol, Hartford, Connecticut on October 11, 1974, at 2:00 P.M.

Copies of the proposed regulations are available from Pesticide Compliance, Department of Environmental Protection, Room G3A, State Office Building, 165 Capitol Avenue, Hartford, between the hours of 8:30 A.M. through 4:30 P.M., Monday through Friday.

These regulations are being adopted for the purposes of:

1. outlining criteria for classification of pesticides.
2. providing for the phasing-in of a five year registration period for pesticide products.
3. setting forth a variance procedure to be used by Pesticide Compliance.

Purpose: To provide for the safe use of pesticides and control pollution resulting therefrom.

Eckardt C. Beck

Deputy Commissioner

#### PESTICIDE REGULATIONS

1. (a) The definition of terms used in these regulations shall be consistent with the definitions in Public Act 73-540.
- (b) The following terms not defined in Public Act 73-540 are defined as follows.

- (1) aquatic use — materials applied on or in water except in self contained artificial structures such as cooling towers and swimming pools.
- (2) bioaccumulation — the concentration of a substance in an organism which exceeds those concentrations found in the surrounding environment.
- (3) breakdown product — a chemical substance resulting from the degradation of a pesticide by physical means.
- (4) carcinogenesis — the generation of malignant tumors in animals.
- (5) Dermal LD50 — the amount of material placed on the skin that will kill 50% of the test animals.
- (6) food chains — the numerous pathways by which matter and energy are exchanged within an ecosystem.
- (7) mutagenesis — the generation of genetic changes by way of mutation in animals.
- (8) Oral LD50 — the amount of material absorbed through the digestive tract that will kill 50% of the test animals.
- (9) "Ready-to-Use" — a pesticide registered and labelled for immediate application without further dilution.
- (10) synergism — cooperative action between two or more agents such that the sum of the effects is great-

er than the single effects taken independently.

- (11) teratogenesis — the generation of congenital birth defects in animals.
  - (12) use dilution — the material as diluted according to label directions just prior to application.
2. Pesticides shall be classified for general use unless they may be classified restricted based upon the criteria in these regulations.
  3. When the Commissioner determines, after review of data available to him with regard to, but not necessarily limited to, the factors listed in Sections 4, 5 and 7 that the use of a pesticide may cause unreasonable adverse effects on the environment he shall classify the use restricted.
  4. When reviewing a pesticide for its classification the Commissioner shall consider a number of factors, including but not limited to the following:
    - (a) human fatalities
    - (b) effects of toxicological significance including but not limited to neurological or behavioral alterations and liver changes
    - (c) mutagenesis and/or teratogenesis
    - (d) carcinogenesis
    - (e) severe skin or eye irritation
    - (f) persistence of the pesticide, a metabolite or other break-down product
    - (g) bioaccumulation of the pesticide or metabolite
    - (h) widespread or common practice which runs contrary to the intent of label instructions and prohibitions
    - (i) risk of contaminating food chains and thereby causing
- (Continued on Page 2)

## CONNECTICUT ASSOCIATION OF GOLF COURSE SUPERINTENDENTS

President ..... Frank Lamphier  
 Vice President ..... Robert Tosh  
 Secretary ..... Bob Osterman  
 Treasurer ..... James MacDonald

### Board of Directors

John Perry            John Lynch  
 Alfred Bachand     Karnig Ovia  
 Robert Chalifour   Edward Anderson  
                          Robert Viera  
 Richard Hoskings, Associate Director

The object of this association is to promote research, education and an exchange of practical experiences in the field of turf grass culture so that the increased knowledge will lead to more economic and efficient management of golf courses and related turf areas.

The CONN. CLIPPINGS is an official publication of the Connecticut Association of Golf Course Superintendents.

Robert W. Osterman, Editor  
 937 Black Rock Turnpike  
 Easton, Conn. 06612

## NOTICE OF INTENT TO ADOPT PESTICIDE REGULATIONS

(Continued from Page 1)

chronic, delayed or secondary poisoning

(j) the extent to which ingredients or degradation products leach from the soil and/or drift as vapors from the target area

(k) synergisms

5. The Commissioner may classify a pesticide restricted when:

(a) the pesticide is intended or labelled for professional use

(b) the pesticide is intended or labelled exclusively for aquatic use

(c) a pesticide used indoors meets one or more of the following criteria:

(1) Oral LD<sub>50</sub>

— 500 mg/kg (product as sold except "Ready-to-Use")

— 2000 mg/kg (use dilution or "Ready-to-Use")

or

(2) Dermal LD<sub>50</sub>

— 2000 mg/kg (product as sold except "Ready-to-Use")

— 500 mg/kg (use dilution or "Ready-to-Use")

or

(3) DDust or mist acute inhalation LC<sub>50</sub> (1 hr. exposure; 14 days observation)

— 5 mg/l

or

(4) Gas or vapor inhalation LC<sub>50</sub> (1 hr. exposure; 14 days observation)

— 2000 ppm

(d) a pesticide used outdoors or in agriculture meets one or more of the following criteria;

(1) Oral LD<sub>50</sub>

— 50 mg/kg (products as sold except "Ready-to-Use")

— 200 mg/kg (use dilution or "Ready-to-Use")

or

(2) Dermal LD<sub>50</sub>

— 500 mg/kg (product as sold except "Ready-to-Use")

— 100 mg/kg (use dilution or "Ready-to-Use")

or

(3) Build up of residues of in-metabolites in mammalian or avian food in amounts — 1/5 LD<sub>50</sub> within five days following application.

6. When the Commissioner determines that restricted use pesticides may cause, without additional regulatory restriction, unreasonable adverse effects on the environment he shall classify the pesticide for permit use only. Permits shall be granted for:

(a) one time use by licensed applicators including, but not necessarily limited to, permits for use of 1080 and aquatic uses of pesticides.

(b) one time use by unlicensed applicators including, but not necessarily limited to, aquatic use or use of restricted use pesticides for termite control on property owned or rented by the permittee.

(c) permanent use by:

(1) licensed applicators for agricultural purposes including, but not necessarily limited to, the use of endrin for control of mice in orchards.

(2) unlicensed applicators for industrial use if such use sufficiently limits spread of the pesticide from the target area.

7. (a) In addition to the previous criteria for restriction, outdoor pesticides having an Environmental Degradation Index, equal or greater than 1 (according to the following formula) will be further evaluated to determine whether use instructions are adequate to prevent unreasonable adverse environmental effects.

$$E=B + (TxM)$$

D

Where E = Environmental Index

B = Bioaccumulation (0,1)

T = Toxicity (0, 1, 2, 3)

M = Mobility (0.50, 0.75, 1.00)

D = Degradation (1, 2, 3, 4)

(b) The following value ratings shall be assigned for computations using the Environmental Degradation Index:

(1) "B" = Bioaccumulation  
 0—When ingredients or metabolites do not bioaccumulate  
 1—Ingredients or metabolites can bioaccumulate in non-target organisms

(2) "T" = Toxicity in non-target organisms (plants or animals)

0 = Non-toxic

1 = Slightly and reversibly toxic

2 = Moderately and reversibly toxic

3 = Product and/or degradation products can cause serious toxicological effects to humans, pets, or domestic animals and/or terrestrial or reproductive decline to non-target aquatic or terrestrial animals.

(3) "M" = Mobility of active ingredients and product

0.5—Non volatile; non-leaching and/or not susceptible to drifting

0.75—Moderately volatile; moderately leachable and/or is susceptible to drift (most crop spraying, etc.)

1.00—Highly volatile; readily leached and/or highly susceptible to drifting (e.g. fogs, gases, mists, crop dusts, and very low volume sprays of less than 5 gallons per acre.)

- (4) "D" = Time to degradation to non-toxic materials
  - 1—Persistent more than 1 year
  - 2—Persistent 3 months to 1 year
  - 3—Persistent 1 month to 3 months
  - 4—Persistent less than 1 month

8. Registration

- (a) Registration of each pesticide shall expire on December 31, according to the schedule set up in (b).
- (b) In order to provide that 1/5 of all products shall be registered each year, on January 1, 1975; those companies whose names start with the letters A-B shall be registered for five (5) years; those whose names start with C-E for four years; those whose names start with F-L for three (3) years; those whose names start with M-R for two (2) years; those whose names start with S-Z for one (1) year. Each subsequent registration shall be for five (5) years.
- (c) A company registering a new pesticide shall have its fee and registration period pro-rated so as to have the next registration date for the new pesticide to fall due with the other products of the same company.
- (d) No refund of a registration fee will be made if a product is voluntarily withdrawn or cancelled before the end of its five (5) year registration period.

9. Variance

- (a) The Commissioner may grant a variance from Section 19-300b-2, Regulations of Connecticut State Agencies, upon request. When acting upon a request for a variance the Commissioner shall take into account, but need not be limited to, the factors listed in Sections 4, 5, and 7 for the particular pesticide.
- (b) Any variance granted under this section shall state whether the pesticide is classified general or restricted.
- (c) Any person wishing to obtain a variance shall file a request with the Commissioner stating with particularity his reasons and justification for the variance shall file a request with the Commissioner stating with particularity his reasons and justification for the variance.

The Commissioner shall have 30 days to grant or deny the variance as requested or as modified by the Commissioner unless a hearing is held to consider the variance. The Commissioner, when he deems it necessary to obtain information, shall hold a public hearing, following such notice as he feels sufficient, to consider the variance. If a hearing is held the Commissioner shall make a decision within 30 days of the end of the hearing.

- (d) A decision to grant or deny a variance shall not be considered an order of the Commissioner for purposes of administrative appeal or judicial review.
- (e) A variance may be so constructed so as to limit the area, amounts, and time of application of the pesticide.

**THE GRASSCATCHER**

by **BOB OSTERMAN**

Following is a letter received from Mr. Stephen Hitchcock, Director, Pesticide Compliance for the State of Conn. If anyone wishes to contact him feel free to do so.

Dear Mr. Osterman:

I have discussed with the Commissioner of Environmental Protection the problems of licensing and the requirements for an operational license that has disturbed some members of the "Golf Course Superintendents". If some of your members wish to meet with Deputy Commissioner Beck and make their views known more directly, I would be happy to set up a mutually agreeable time to do so. If this would be useful, perhaps 3 or 4 members of the association might want to join you.

Very truly yours,  
 Stephen W. Hitchcock  
 Director  
 Pesticide Compliance

Joe Torok, Superintendent Hop Meadow Country Club, has been re-classified in the GCSAA from a Class "F" member to that of Class "A".

Jim MacDonald has notified me on plans for the CAGCS Christmas Party. It will be held at the Farms Country Club, Chester Rd., Wallingford, Saturday, December 7, 1974. The cost will be \$24 per couple.

We had a super turnout last year and all had a great time. Let's see if we can go one better for this year.

**DEICING SALTS SEVERELY DAMAGE KEY ELEMENT IN LIFE OF MAPLE TREES**

STORRS — Deicing salts spread on highways in winter have been found to cause severe damage to the mycorrhizae of roadside sugar maple trees.

Mycorrhizae — key to plant life — are the symbiotic association of certain fungi with the roots of plants.

This finding was reported at the recent Second North American Conference on Mycorrhizae held at Corvallis, Oregon, by Dr. A. J. R. Guttay, head of the plant science department at the University of Connecticut.

He said that such trees, showing extreme dieback of the top growth and leaf scorch, were generally found to have mycorrhizal roots in the top six inches of soil. In addition, other symptoms of salt damage were early leaf coloration and leaf fall. In contrast, healthy sugar maples were heavily mycorrhizal right to the soil surface.

Dr. Guttay, who studied the complex role of mycorrhizae in plants while on sabbatic leave last fall, stated that destruction of the mycorrhizae — the prime feeder roots of the trees — amounted to a severe root pruning. The remaining deeper roots were unable to sustain the trees with resultant dieback of the crown.

As for leaf scorch and other leaf damage, he believed that these occurred after destruction of the mycorrhizae. His research showed that massive uptake of salts to the leaves did not occur until after mycorrhizae were destroyed.

Additionally, the UConn plant scientist noted that deicing salts had generally destroyed the soil structure around the tree. The soil was so hard and compact and retained sufficient sodium that he doubted the tree roots could grow back into that soil, even if no further salts were applied.

Dr. Guttay felt that on severely damaged trees the only possible solution was to remove the compact, salt polluted, root-free soil and replace it with leaf compost.

He recommended the use of leaf compost, since the continued deicing operations necessary to safe winter driving conditions would have a lesser detrimental effect upon compost than on soil.

He added that a mulch of wood chips placed on top of the compost would improve the esthetics of the compost as well as provide protection from erosion.



### NOMINATING COMMITTEE REPORT

The Nominating Committee, with Fred Bachand as Chairman, has submitted the following slate of officers and directors to be presented to the membership at our annual meeting in November.

- President ..... Frank Lamphier
- Vice-President ..... Robert Tosh
- Secretary ..... Bob Osterman
- Treasurer ..... Jim MacDonald
- Director (3 years) .. Ron Holcomb
- Education ..... Fred Bachand
- Golf ..... Bob Silva
- Public Relations ..... Bob Chalifour

It is strongly urged that all members make a special effort to attend this meeting, as it is our annual meeting and our last meeting of the year.

Following are the winners in this year's CAGCS Championship.

#### FLIGHT "A"

- LOW GROSS & ASSOCIATION CHAMP — Dick Cook — 76-77-153
- 2ND LOW GROSS — Dave Roule 79-78-157
- LOW NET — Roger Barrett 159-14-145
- TIE — Bert Furgess 171-26-145

#### FLIGHT "B"

- LOW GROSS — Bob Tosh 85-98-183
  - 2ND LOW GROSS — Mark Loper 191-50-141
  - LOW NET — Dave Stimson 187-42-145
- #### ASSOCIATES
- LOW GROSS — Bob Kennedy 72-82-158
  - 2ND LOW GROSS — Bill Somers 91-87-178
  - LOW NET — Dick Hosking 195-60-135

### THE FOLLOWING COMPANIES ARE CONTRIBUTING TO THE SUPPORT OF THE CONN. CLIPPINGS:

- THE BISHOP COMPANY — AGRICO COUNTRY CLUB  
Turf Care Products  
*Dan Brogan*  
14 Wiedeman Avenue  
Clifton, New Jersey 07011
- AGWAY COMMERCIAL SALES  
Turf & Buildings Automation  
Agway Inc. Eastern Division  
*Robert J. Barber*  
Pub Circle  
Hebron, Conn. 06248  
(203) 646-3668
- METRO MILOGRANITE INC.  
P.O. Box 267  
Hawthorne, New York 10532  
*John Wistrand*  
(914) 769-7600
- SOMERS TURF SUPPLIES  
P.O. Box 294  
Devon, Conn. 06460  
*Bill Somers, CAGCS Member*
- THE CHAS. C. HART COMPANY  
304 Main Street  
Wethersfield, Conn.  
*Robert Kennedy, CAGCS Member*  
(203) 529-2537
- VALLEY FARMS TURF NURSERY  
Box 81  
Avon, Conn. 06001  
*Joe Bidwell, CAGCS Member*  
(203) 658-6886
- TOM IRWIN CO.  
113 A Street  
Burlington, Mass.  
*John P. Callahan, CAGCS Member*  
Phone (203) 677-7054
- NORTH EASTERN TURF CORP.  
730 Hop Meadow Street  
P.O. Box 424  
Simsbury, Conn. 06070  
*Robert Scully, CAGCS Member*  
(203) 658-0387

- IRRIGATION & EQUIPMENT SUPPLY COMPANY  
Milford, Conn.  
*Richard W. Smith, CAGCS Member*  
*Richard W. Hosking, CAGCS Member*  
(203) 874-1096
- THE MAGOVERN COMPANY  
Windsor Locks, Conn.  
*Lloyd Russell, CAGCS Member*  
*Curtis Stimson, CAGCS Member*  
(203) 623-2508 255-2817
- OLD FOX CHEMICAL COMPANY  
Harzardville, Conn. 06082  
*John Grant, CAGCS Member*  
P.O. Box 62  
Pleasant Valley, Conn. 06063  
(203) 379-3579
- LARCHMONT ENGINEERING & IRRIGATION INC.  
Lexington, Mass. 02173  
*Steve Butler, CAGCS Member*  
(617) 862-2550
- O. M. SCOTT & SONS  
Pro Turf Division  
Marysville, Ohio  
*Al Arison, CAGCS Member*  
(203) 366-9890
- ALFCO, INC.  
Phone (614) 377-1394  
P.O. Box 267  
Marietta, Ohio 45750  
*Frank Downey, CAGCS Member*  
(413) 596-3009
- THE POWERHOUSE  
Route 6 & Dingle Ridge Road  
Brewster, N. Y. 10509  
*Russ LeClair, CAGCS Member*  
(914) 279-7181
- AMERICAN BIO-TURF  
P.O. Box 424, Glen Head  
Long Island, N. Y.  
Phone (516) 484-5930  
*Len Milloux, General Manager*

### CONN. CLIPPINGS

Robert Osterman, editor  
937 BLACK ROCK TURNPIKE  
EASTON CONN. 06612



## FIRST CLASS



DR. RICHARD CHAPAN  
DIRECTOR OF LIBRARIES  
% O. J. NOER LIBRARY  
MICHIGAN UNIVERSITY  
E. LANSING, MICH 48823