

333 CMR: PESTICIDE BOARD

333 CMR 12.00: PROTECTION OF GROUNDWATER SOURCES OF PUBLIC DRINKING WATER SUPPLIES FROM NON-POINT SOURCE PESTICIDE CONTAMINATION

Section

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12.01: Purpose

The purpose of 333 CMR 12.00 is to prevent non-point source contamination of public drinking water supply wells from pesticides products on the groundwater protection list.

12.02: Definitions

Apply means the act of releasing a pesticide to control the target pest(s) in accordance with label directions.

Groundwater Protection List refers to the list of pesticide products which: (1) contain a potential groundwater contaminant(s); (2) have been registered as restricted use by the U.S. EPA due to groundwater concerns pursuant to 40 CFR 152.170, or; (3) have been registered as state restricted use for groundwater concerns by the Pesticide Board Subcommittee.

Highly Vulnerable Site refers to a site which meets or exceeds the following criteria:

- (a) Soil Conservation Service Hydrologic Soil Group A soils, whose products of the top soil horizon, in inches, and the soil organic matter, in percent, is less than or equal to 15; and
- (b) the depth to the aquifer is less than 15 feet; and
- (c) the depth to the fractured bedrock or seasonable high water table is less than four feet.

Indoor Setting refers to an application site which is not open to the soil or not vulnerable to weather conditions, including precipitation, and is located within a protected structure.

Integrated Pest Management is an ecologically based approach to pest control, combining several different techniques including biological, mechanical, cultural and chemical controls to maintain pests below damaging levels.

Leaching Potential refers to a pesticide which meets or exceeds the following criteria based upon the most conservative data and information published in the US EPA Environmental Fate and Groundwater Branch Pesticide Fate One-Line Summaries:

- (a) water solubility greater than or equal to 3 ppm, or;
- (b) Koc less than or equal to 1900, or;
- (c) Kd less than or equal to 20 in the absence of a reported Koc value, and;
- (d) soil half life greater than or equal to seven days.

An absent or missing reported criterion will be considered as meeting or exceeding the criteria value.

12.02: continued

Potential Groundwater Contaminant refers to a pesticide which meets the definitions of "Toxicological Concern" and "Leaching Potential".

Primary Recharge Area refers to a land area determined to be a Zone II as defined in 310 CMR 22.02 or, in such cases where a Zone II area has not been approved by the Department of Environmental Protection, it shall be designated as the interim area of special protection of a one-half mile radius from any public drinking water supply well.

Public Drinking Water Supply Well refers to a public water supply well or wellfield determined by the Department of Environmental Protection which meets the requirements of 310 CMR 22.21(1)(c), (d) or (e); or is registered with the Department of Environmental Protection pursuant to 310 CMR 36.04.

Soil Apply means an application of a pesticide is made:

- (a) directly onto or into the soil according to label direction terminology, including but not limited, to incorporation, injection, soil treatment, soil drench, fumigation, mixed into soil, or in seed furrow, or;
- (b) to an area which has less than 50% foliar ground cover.

Toxicological Concern refers to a pesticide which meets or exceeds of the following criteria:

- (a) Lifetime Maximum Contaminant Level (MCL), Proposed Maximum Contaminant Level (pMCL), DEP Office of Research and Standards (ORS) Guidelines, or Health Advisory Level (HAL) less than or equal to 20 ppb; or
- (b) US EPA classification as a known or probable human carcinogen, categories A, B1 or B2.

12.03: General Provisions

- (1) No person shall apply any product on the groundwater protection list within a primary recharge area without adoption of a Department approved integrated pest management program.
- (2) No person shall soil apply any product on the groundwater protection list within a primary recharge area unless that person has obtained of a pesticide management plan approved by the Department pursuant to 333 CMR 12.04.
- (3) No person shall apply any product on the groundwater protection list within a primary recharge area inconsistent with the conditions of a pesticide management plan or the integrated pest management program.
- (4) Products on the groundwater protection list are exempt from restrictions under 333 CMR 12.00 provided that the product is labelled for, and applied exclusively in an indoor setting.
- (5) Pesticide products which contain a potential groundwater contaminant are exempt from the groundwater protection list provided that the product is: an aerosol product; a paint product; a finished bait product, or; a product applied directly to humans, domestic animals or livestock.
- (6) The Department will produce and update the groundwater protection list on a yearly basis, as of January 1 of each year.
- (7) No person shall apply any product on the groundwater protection list within a primary recharge area if a viable alternative exists.

12.04: Pesticide Management Plan (PMP)(1) Application.

(a) The proponent of a pesticide management plan shall supply, on a form or format provided by the Department, evidence adequate to the Department to justify the approval of a pesticide management plan, including but not limited to each of the following:

1. Name and EPA Reg. No. of the pesticide product(s) on the groundwater protection list proposed for use;
2. All maps necessary to identify the anticipated use site in relation to the primary recharge area;
3. Written evaluations of alternative control methods, including economic ramifications;
4. Information including: target pest, method of application, rate of application, irrigation practices (if any), crop and the percent of foliar ground cover;
5. Storage, handling, mixing and loading procedures;
6. The specific Department approved integrated pest management program that has been adopted;
7. Site specific data of each of the following:
 - a. Top soil horizon depth;
 - b. Depth to seasonal high water table;
 - c. Soil Conservation Service Soils Hydrologic Group;
 - d. Soil test results of percent organic matter;
 - e. Any available monitoring data including a list of wells on the site;
 - f. Other data which supports a finding that the anticipated use site is not a highly vulnerable site.

(b) All information submitted in the application must reference the source of the data. The Department reserves the right to request additional information from the applicant at any time throughout the review process.

(2) Inter-departmental Review.

(a) The Department will inform the Department of Environmental Protection and the Department of Public Health within 15 days of receipt of a proposed pesticide management plan and shall make the pesticide management plan available for their review.

(b) Any comments submitted by the Department of Environmental Protection and Department of Public Health regarding a proposed pesticide management plan will be reviewed by the Department, and the Department will advise the other agencies of the preliminary findings before rendering a decision.

(3) Disposition of Application. A proposed pesticide management plan for the application of a product on the groundwater protection list to a site in a primary recharge area otherwise prohibited by 333 CMR 12.03, may be accepted by the Department only if it finds that each of the following exist:

- (a) the anticipated use site is not a highly vulnerable site;
- (b) the acceptance of the pesticide management plan is not likely to cause an unreasonable adverse effect on the environment;
- (c) there is no viable alternative control method other than the use of the product on the groundwater protection list;
- (d) implementation of the Department approved IPM or pesticide management plan will minimize to the maximum extent possible the application of products on the groundwater protection list;
- (e) that no product on the groundwater protection list has been detected as a result of the groundwater monitoring program. Said detection shall result in the prohibition of the product's use within the primary recharge area of a public water supply well in which the pesticide has been detected.

12.04: continued

(4) Notification.

(a) Within 60 days of receipt of a completed application, the Department will render a written decision notifying the applicant that the proposed pesticide management plan has been:

1. approved;
2. denied, or;
3. held, pending additional information.

(b) In the event that the Department is unable to render a decision pending further information, the Department will inform the applicant of the specific information needed to complete its evaluation at the time of notification.

(c) Within 30 days of receipt of the additional information, the Department will render a decision in accordance with 333 CMR 12.04(3).

(d) In the event that the Department approves a pesticide management plan, the Department may impose conditions on the use of the product on the groundwater protection list.

(5) An approved pesticide management plan shall be valid for a period of one calendar year from the date of issuance and may be renewed pursuant to 333 CMR 12.05.

12.05: Renewal and Amendments

Any applicant desiring to amend or renew a pesticide management plan shall submit an application, on a form or format provided by the Department, for review by the Department in accordance with the provisions of 333 CMR 12.04.

12.06: Revocation

(1) The Department may revoke, suspend or modify an approved pesticide management plan, by written notice to the proponent if it finds:

- (a) That the conditions or restrictions of the pesticide management plan are being violated or are inadequate to avoid significant risk of groundwater contamination or adverse human health effects;
- or
- (b) that the applicant has made a false or misleading statement in any information provided pursuant to 333 CMR 12.04.

(2) The Department may prohibit the use of a product on the groundwater protection list product if it finds that the conditions of the integrated pest management program are not being followed.

12.07: Record Keeping

Any person who applies a pesticide product on the groundwater protection list within a primary recharge area, except those products exempted pursuant to 333 CMR 12.03, shall file annually with the Department information as required by the Department including but not limited to 333 CMR 12.04(1)(a)1. through 6. provided that a list of addresses identifying sites treated may be substituted for the requirements of 333 CMR 12.04(1)(a)2.

12.08: Penalties

Any person in violation of 333 CMR 12.00 shall be subject to civil or criminal penalties pursuant to M.G.L. c. 132B, § 13.

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12.09: Appeal

Any person aggrieved by a decision of the Department to deny, revoke, suspend or modify a pesticide management plan or the use of a product on the groundwater protection list, may request an adjudicatory hearing before the Pesticide Board as provided for pursuant to M.G.L. c. 132B, § 13. The request for a hearing must be made in writing and received by the Department within 21 days of the decision.

12.10: Effective Date

333 CMR 12.00 shall be effective on January 1, 1992.

REGULATORY AUTHORITY

333 CMR 12.00: M.G.L. c. 132B, § 13.