

GOLF COURSE PERMIT RENEWAL APPLICATION INSTRUCTIONS

Introduction: These instructions will help you complete the permit renewal application. Please read them **thoroughly** before starting. The permit application is essentially the same as before. The majority of the information required by this application can be found in your current management plan. You may need to update your current management plan and pesticide use information to reflect current practices and use patterns. **Pay particular attention to those areas in bold in this application as they will need to be addressed in the updated management plan.**

Pre-Screened List

Included with these instructions is the pre-screened pesticide list. Pesticides on this list have already been approved by VPAC for use on Vermont golf courses. These pesticides are unlikely, under normal use and conditions, to enter surface or groundwater and pose an unacceptable risk to aquatic organisms or drinking water. Keep in mind that this list is subject to change. Requests for the use of pesticides not on the list will require additional information.

Permit Conditions

1. Operation of the course must be conducted in accordance with the approved pesticide management plan.
2. Additional buffer strips, when necessary and appropriate, shall be established to protect surface waters and other environmentally sensitive areas.
3. Sampling and analysis of ground and surface water may need to be conducted in certain circumstances. The Commissioner's decision on sampling may be subject to a hearing by aggrieved parties.

Completion of Permit Application

I. General Information

- a. Golf course name
- b. Golf course location
- c. Mailing address and phone number

- d. Name of person responsible for completing the application and management plan.
- e. The name, title and signature of a golf course officer is required.
- f. Date of application

2. Permit Status -

All renewal applications for existing facilities check:

- A. Renewal
- B. Existing

3. Pesticide Information

- a. Pre-Screened List - List the pre-screened pesticides intended for use. The most important section to complete is active ingredient. Also include the EPA registration numbers and the trade names of every product you will be using. Use extra pages as necessary. As long as the active ingredients remain the same, different trade names or EPA registration numbers can easily be amended to an approved permit. Once again, it's very important to include the correct active ingredients intended for use.
- b. **Non Pre-Screened Pesticide Use** - If you wish to use pesticides not on the pre-screened list additional information will be required. According to the regulations; "When the use of a pesticide(s) is (are) requested which is (are) not found on the current Prescreened pesticide list or when otherwise required by the commissioner to evaluate risk, the applicant will provide additional information which will justify the use of the pesticide within an acceptable level of risk. The following information or any other pertinent information may be submitted in support of this justification:
 - 1. Expected pesticide concentrations in:
 - a. Nearest private and all public water sources of concern. This can be achieved by using a simple dilution analysis, which is a calculation that uses a proportion of well yield and/or precipitation and irrigation. These are your groundwater/ leaching dilution calculations.

- b. Flowing surface water at the point of exit from the golf course boundary. This represents your surface water/runoff dilution calculations.
 - c. Standing surface water (only needed if deemed necessary by the Department of Environmental Conservation, Water Quality Division.)
2. A comparison between the expected concentrations and Vermont's Water Quality Guidelines and the Vermont Department of Health Drinking Water Standards.
 3. The hydro geologic setting, i.e., flow patterns, receiving waters, recharge and discharge areas, range of depth to groundwater, aquifer type and any presence of hydraulic conductivity.

The hydro geologic setting should be discussed in relation to your use of the specific pesticide(s) and how the particular hydro geologic characteristics of the golf course would effect the risk of using the pesticide(s). Refer to your existing management plan and permit application for this information.

Included in this discussion should be information regarding the location and discharge points of all greens, tee, bunker and fairway drainage systems if known.

4. Identification of any environmentally sensitive areas and whether the use of pesticides would destroy or significantly endanger the same.

Included with the application is a form to be used for additional information about non pre-screened pesticides and their intended use. This is where you document the dilution calculation work. The following information must be included:

- 1) Intended use site (greens, tees, approaches etc.) and potential acres of application for additional compounds.**
- 2) Rate of application in pounds per acre of active ingredient.**
- 3) Number of applications per year proposed.**
- 4) Total pounds of active ingredient to be used annually.**
- 5) Expected concentrations in surface/ground water**
- 6) Comparison to Vermont Water Quality Guidelines and the Primary Groundwater Quality Standards; Enforcement Standard**

4. Golf Course Description

You will need to attach a detailed description of your course if not previously submitted or if there have been changes to the course since the last submission. It must include the following:

- a. Site Plan - a map which details:
 - i. Tees, greens and fairways by hole number and supporting operations.
 - ii. Irrigated areas and source(s) of water
 - iii. Surface waters, identified by name if known
 - iv. All known groundwater sources
 - v. All private water sources of abutting properties within 200 feet of any area of the golf course where pesticides may be used.
 - vi. All public water sources (including all on site water supplies) and source protection areas if applicable
 - vii. Location and identification of environmentally sensitive areas
 - viii. Property boundaries
 - ix. Buildings and their use
 - x. Legend, scale and compass designation
- b. A copy of a USGS topographical map showing the general location of the facility if not previously submitted.
- c. The square footage of each green (and associated collars/approaches) and tee.
For all greens (and associated collars/approaches) and tees which are within 100 feet of surface waters or class II wetlands the exact distance in feet from the nearest treated area to the surface water or class II wetland.
- d. The acreage of each fairway. Round to nearest whole number if you are uncertain. Separate the acreage for rough area and main fairways and provide a total of all fairway acreage at the end. Indicate all treated areas within 100 feet of surface water or class II wetlands.

- e. The total acreage of the facility and square miles of drainage area for flowing surface waters at the point of exit from the golf course property. In most cases this is simply the total golf course acreage.
- f. The surface acreage and average depth of any ponded surface waters. The primary supply source must be identified for each pond - ie; runoff, springs, well, river etc.
- g. General description of soils on the site and/or NRCS soils map and key if not previously submitted.
- h. National Wetland Inventory Map of your area with any mapped wetlands (Class II) on or abutting the golf course clearly identified if not previously submitted.
- i. Documentation of location of nearest public community water supplies. This information can be obtained from the Water Supply Division of The Department of Environmental Conservation in Waterbury.

5. Pesticide Management Plan

Please provide an in-depth description of your pest management practices. This includes weeds, insects, plant diseases, and rodents or other vertebrate pests. The following guidelines will give you an idea of how to assemble a pest management plan. For review purposes, however, your plan at a minimum must include:

- a. A general policy statement on the goals of your pest management plan. This short opening statement should set the stage for the discussion and review of your plan. **It should include the course's strategy for minimizing pesticide use. It should also sum up the course's history or philosophy of pesticide use and any progress toward reducing pesticide use that has been achieved. Include pesticide use data for the last 5 years.**
- b. A Description of Pest Problems. This should be a five year synopsis of all pest problems that the course has experienced. Include the location and extent of infestation for the most severe pests. Also include ornamental pest problems if control measures are used.
- c. Pest Management Practices to be used. The pest management program should include a combination of biological, cultural and chemical controls. Discuss the types of pesticides used and why, how and when you decide to use them, how you incorporate other control techniques, **This section should include a discussion of any changes being made to the pest management plan.**

- d. Description of Pest Monitoring Practices. Describe how you are monitoring pests, i.e., routine scouting, weather information, traps, phenology etc. If your course uses any unique monitoring tools or practices, this is the section to include them in. Include information regarding thresholds used and records of monitoring kept.
- e. Pesticide Handling Procedures. Include:
1. Location of pesticide storage
 2. Description of pesticide application equipment
 3. Mixing and loading site information
 4. Rinsate and excess dilution disposal practices
 5. Container disposal
 6. Emergency response and spill procedures
- f. Irrigation Practices. Include the type of system used, rates and intervals of irrigation, source of irrigation water and if irrigation is incorporated in any pest management schemes.
- g. Unique Features. Include a description of any features of the facility designed to reduce pest pressure, pesticide use or pesticide impacts. **Please include information regarding procedures used to inform abutting neighbors of concern about pesticide use at the facility and where they may obtain more information.**
- h. Buffer Zones. Buffer zones from surface waters, wells and class II wetlands should be described in detail by hole, and site (green, tee, fairway etc.). Standard buffer policies include the establishment of a 25 foot buffer where no pesticide application is allowed and a 26 to 50 foot buffer zone where spot application only is allowed for all surface waters. All Class II wetlands require a 50 foot no application buffer unless otherwise permitted by the Department of Environmental Conservation.

Private wells and public non community water supplies must include a 100 foot no application buffer and public community water supplies must include a 200 foot no application buffer.

Any areas which may require pesticide application within 25 feet of surface water, 100 feet of private and public non community water supplies, 50 feet of class II wetlands or 200 feet of public community water supplies must be identified. Use in these areas will be considered on a case by case basis and maybe subject to additional restrictions.

6. **Permit Provisions** - Self-explanatory; Applications not signed will be returned.

Conclusion: Send the completed application and management plan to:

Vermont Agency of Agriculture, Food and Markets
Plant Industry Division
116 State St./Drawer 20
Montpelier, VT 05620-2901

Call (802) 828-3478 if you have questions or need any help.

Completed applications may be reviewed by the Vermont Pesticide Advisory Council (VPAC). You will be notified of your review date after you have submitted your completed application and management plan. If VPAC recommends the permit for approval, then it will be sent to the Secretary of Agriculture for final approval, denial or approval with conditions. The Secretary has the final authority. If you disagree with the Secretary's decision, you may request a hearing within fifteen (15) days of your receipt of the permit.

INFORMATION SOURCES

PESTICIDE FACT SHEETS: Extension Toxicology Network
Exttoxnet - <http://ace.orst.edu/info/exttoxnet>

Pesticide Action Network Database
www.pesticideinfo.org/

National Pesticide Telecommunications Network
www.ace.orst.edu/info/nptn/index.html

WATER SUPPLIES/WELL LOGS/WELL INFORMATION:

Water Supply Division
Vermont Department of Environmental Conservation
802-241-3400
www.anr.state.vt.us/dec/water/.htm

WETLANDS/SURFACE WATER INFORMATION:

Water Quality Division
Vermont Department of Environmental Conservation
241-3777

SOILS:

Natural Resources Conservation Service
www.vt.nrcs.usda.gov/
numerous state offices

PESTICIDE REGULATIONS; PERMITTING PROCESS

Jim Leland
Vermont Agency of Agriculture, Food and Markets
802-828-3478