

Changes to the Vermont Golf Course Permitting Process

A “Soft” Rollout





Current Pesticide Regulations

- ▶ 1991!
- ▶ Cover all aspects of Pesticide use in Vermont:
 - ▶ Licenses, Certificates, and Permits issued by the Agency (includes procedures)
 - ▶ Powers of the Secretary
 - ▶ Restrictions on the use and application of pesticides
 - ▶ Maintenance of Records
 - ▶ Certification Standards
 - ▶ Pesticide Classification
 - ▶ Community Right-to-Know, Emergency Actions, Accident Reporting
 - ▶ Transportation, Storage and Disposal of Pesticides



Section IV – Restrictions on the Use and Application of Pesticides

- ▶ 9. Golf Course Permits
 - ▶ New Requirements in Regulations



New Requirements in Vermont Golf Course Regulations

- Additions to Golf Course Integrated Pest Management Plan
 - A description of the location of **pesticide storage** and handling areas including a **spill response plan**.
 - A **Nutrient Management Plan (NMP)** including:
 - A description of **goals** of NMP
 - Identify **areas** where nutrient applications will be made (greens, tees, fairways, roughs, etc.)
 - **Soil sample test results** for each area receiving nutrients
 - Test results must be **less than 3 years old**
 - Soil samples **Collected** according to University or Industry standards



New Requirements in Vermont Golf Course Regulations

- ▶ Soil Test Results shall be analyzed for:
 - ▶ Available **P** using **Modified Morgan**
 - ▶ Reactive Aluminum
 - ▶ Soil Nitrate (?)
 - ▶ pH
 - ▶ Organic Matter
 - ▶ Potassium



New Requirements in Vermont Golf Course Regulations

- ▶ All land receiving fertilizer shall determine the potential for nitrogen transport using:

The Nitrogen Leaching Index

Map Layers

Layer Theme: Atlas Layers (default)

- Atlas Layers
 - Waste Management
 - Fish and Wildlife
 - Watershed Protection
 - Geology
 - USGS Mineral Resources Data System
 - Sand and Gravel Deposits
 - Vermont Agricultural Onsite Mitigation 2
 - Quarry
 - Surficial Geology (Linear Features)
 - Surficial Geology (Feature Type)
 - Surficial Geology (Lithology)
 - Nitrate Leaching Index
 - 2-10
 - 10-20
 - 20-50
 - 50+
 - 50-60
 - water
 - Soils - DEC On Site Sewage Disposal Rati
 - Soils - Hydric
 - Soils - Hydrologic Groups
 - Soils - Prime Agricultural
 - Soils
 - Bedrock Faults and Contacts

Show Legend

Filter...





New Requirements in Vermont Golf Course Regulations

- ▶ All land receiving fertilizer shall determine the potential for nitrogen transport using:

The Nitrogen Leaching Index

~~phosphorus transport~~ using:

~~— **The Vermont Phosphorus Index**~~



New Requirements in Vermont Golf Course Regulations

- ▶ Nutrient applications shall be based on **University recommendations** and/or industry practice appropriate for the geographic area.

Sid Bosworth's Golf Course Turf Recommendations (N and P) from UVM

(on website once finalized)



New Requirements in Vermont Golf Course Regulations

- ▶ Soil Sample results shall be maintained for **5 years**
 - ▶ kept at the golf course and made available upon request
(during inspection for example)



Changes to the Permit Process

You all (most) have permits in place that are still in effect (no expiration date)



Changes to the Permitting Process

- ▶ Permits shall be renewed **annually**

To renew: report pesticide usage (details to follow)

report fertilizer usage (details to follow)

requests for additional pesticides, or increase amount needed

signed affidavit (superintendent and GC officer) that GC is in compliance with all permit requirements

Renewal form mailed to the course at end of year will prompt you for required information. (See handout)


Confirm mailing address – where should renewal form go?



Pesticide Usage Reporting



Fertilizer Usage Reporting



Reporting **Fertilizer** Usage for Previous Season

What information to report:

1. Total N and P used
2. Totals of each, broken down by site of application (greens, tees, fairways, roughs, etc.)
3. Average rate of N and P used per acre by site of application

Don't worry, the Daily Record and Permit Renewal form will guide you!



New Requirements in Vermont Golf Course Regulations

- ▶ **Buffer strips** to protect surface waters, groundwater or other environmentally sensitive areas shall be established*. Standard buffers where pesticides shall not be applied shall be established as follows:
 - I. 100 feet from all private drinking water supplies and public transient drinking water supplies
 - II. 200 feet from all public, non-transient drinking water supplies
 - III. 25 feet from all flowing surface waters and Class II wetlands
 - IV. 10 feet from impounded surface waters wholly on the golf course property.
 - V. 25 feet from impounded surface waters not wholly on the golf course property.

****unless larger buffers are already established in your current permit!***



Record Keeping

(Maintain at the Golf Course for 5 years)

- ▶ Record for each application of **pesticides**:
 1. Date and time of application
 2. Site of application
 3. Pesticide(s) used and EPA Registration Number
 4. Active ingredient
 5. Amount of pesticide product used
 6. Pounds of active ingredient used
 7. Weather conditions at the time of application



Record Keeping

(Maintain at the Golf Course for 5 years)

- ▶ Record for each application of **fertilizer/nutrients**:
 1. Site of application (tee, green, fairway, rough etc.)
 2. Area of application in acres
 3. Date of application
 4. Nitrogen recommendation
 5. Phosphorus recommendation
 6. Grade/analysis of fertilizer applied
 7. Amount of NO_3^- and P_2O_5 applied per acre

Record Keeping

(Maintain at the Golf Course for 5 years)

Use copies of my form

Fill up a binder

Make timely and accurate entries!

Keep it in a safe place



VT GC Daily FERTILIZER Records

Golf Course _____
Year _____

*These records must be maintained
at the Golf Course for (5) years,
and made available to the Agency upon request.*

Date	Site of Application(s) (greens, fairways, etc. with hole #s)	Fertilizer Grade/Analysis	# Acres Fertilized	Nitrogen recommendation	Phosphorus recommendation	Amount of NO ₃ applied per acre	Amount of P ₂ O ₅ applied per acre

Do not submit this form to the Agency, but instead use these records to compile your fertilizer usage for your end-of-year report.



How to amend your permit

- ▶ To add active ingredients, or increase amount on permit
 - ▶ Go to Golf Course Permit Website
 - ▶ **To add Prescreened** - Current Prescreened Active Ingredient List
 - ▶ **To add Non-Prescreened** - Vermont Golf Course Dilution Worksheet (Microsoft Excel Spreadsheet)



Permit Renewal Form

- ▶ Go through example handout
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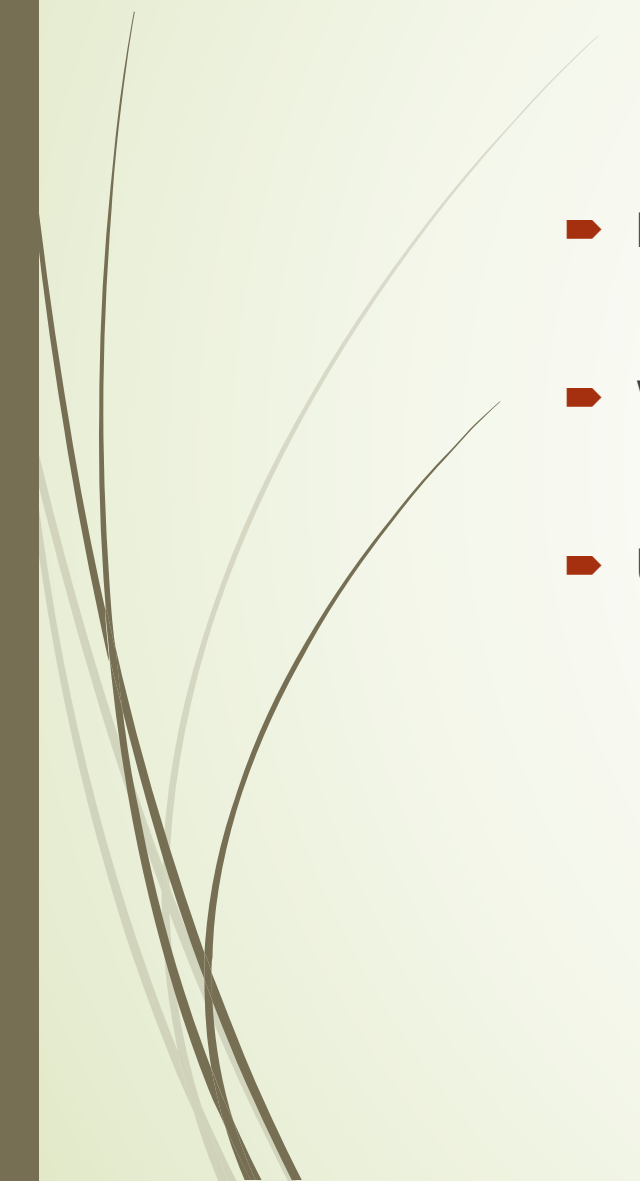


Golf Course Permit

- ▶ Go through example handout
- 



Starting this Season...

- ▶ Begin soil testing parts of course to be fertilized, 1/3 of course per year.
 - ▶ Write Nutrient Management Plan (NMP)
 - ▶ Use forms to keep records of all pesticides and fertilizers applied.
- 



This Fall...

- ▶ Golf Course Permit Renewal Forms mailed out around Thanksgiving (does this work?)
- ▶ Pesticide Applicator Certificate Renewal form will come separately, and will be returned separately!
- ▶ Golf Course Permit Renewal form goes to Matt!



Finally...

- ▶ Please call or email me with any questions!

Matthew Wood

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Website will have EVERYTHING:

http://agriculture.vermont.gov/pesticide_regulation/pesticide_permitting/golf_course_permits

Just google “Vermont Golf Course Permit”