

Nutrient Management Plan (NMP) Help

Remember, your Nutrient Management Plan will often be referred to as a “NMP.” Here are some tips and guidance to help with writing a nutrient management plan for your golf course. The proposed regulations on golf course NMPs are **in bold** below, and my tips follow each section *in italics*.

...A Nutrient Management Plan which shall include the following:

a) A brief description of the goals of the nutrient management plan

(This should just be a paragraph that describes the goals of your NMP. Talk about how you are managing for high quality turf and water quality, since dense, healthy turf helps to reduce runoff or leaching of pesticides and fertilizers that are applied. Remember your goal is to protect water quality while maintaining the golf course in premium condition.)

b) Identification of areas where nutrient applications will be made including greens, tees, fairways and roughs.

(Discuss the areas of the course where you plan to use fertilizer, and why. Also discuss the areas that do not need or get any fertilizer applications, and why they don't. Maybe you can't afford to fertilize all areas, so you need to prioritize. Go ahead and say that... Maybe some areas only get fertilized every second or third year. Your soil testing should guide your decision-making.

Describe soil sampling here too. Describe what your planned soil sampling schedule looks like. Have you been soil testing for years already? - say that. If you are just getting started with soil testing the course, you can discuss that. What parts of the course are priority?

If soil samples from areas of similar soil, fertilizer use and management are combined, then describe that process and justify why you feel they are similar enough to combine into a “representative” sample. That's fine to do, but just describe why.

Be sure to read Dr. Sid Bosworth's “Fertilization and Nutrient Management Guidelines for Golf Turf in Vermont” and use his Soil Test Sampling recommendations, and any others, in your discussion.)

c) Soil sample results for each area receiving fertilizer applications. Areas receiving fertilizer applications shall be sampled once every three years. Soil samples shall be collected according to university recommendations or standard industry practice. Soil samples shall be analyzed for:

- 1. Available phosphorus using Modified Morgan Extract.**
- 2. Potassium**
- 3. pH**
- 4. Reactive aluminum**
- 5. Soil organic matter**

(Keep all soil test results (or copies of them) in this file as part of your nutrient management plan. Please do not send them in to the Agency. If you've been soil testing for years, remember to add copies of all those past results to your NMP file, and you're off to a great start.)

(continued →)

d) All land receiving fertilizer shall determine the potential for nitrogen transport using the nitrate leaching index.

(See my handout for finding the nitrate leaching index for your golf course online, print the map, and place it in your NMP file.)

e) Nutrient recommendations shall be based on University recommendations and or industry practice appropriate for the geographic area. Nutrient recommendations shall be consistent with results of the nitrate leaching index.

(Nutrient recommendations in soil test results from UVM already have Dr. Bosworth's recommendations incorporated into them. You may use another lab to test your soil, but be sure they use the Modified Morgan Extraction method, and you'll need to use the tables in Dr. Bosworth's guidelines to interpret those soil test results into a fertilizer use recommendation.)

f) Soil sample results shall be maintained for 5 years.

(Soil test results must be kept for 5 years, but why not just keep them indefinitely?)