Yard Clippings Compost Recommended Testing Parameters

According to Section 11521(4)(d)(ii) of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, all registered composting facilities must maintain certain records that demonstrate that the composting is being done in a manner that prevents nuisances and minimizes anaerobic conditions. Included in the records that must be kept is the requirement to perform testing on the finished product. This ensures that the composting process has been completed (if the material has not fully composted it has the ability to draw nitrogen from the soil that may kill or inhibit plant growth) and that the end user understands what the finished compost contains and how to use it. Each pile or mix design should have a sample tested, on a yearly basis. The Department of Environmental Quality (DEQ) suggests that the finished compost be tested for the parameters listed below, at a minimum.

Ph
Carbon to Nitrogen (C:N) ratio
Electrical Conductivity (i.e. soluble salts)
Total nutrient analysis
- Total N, P, K
- Calcium
- Magnesium
- Sodium
- Zinc
- Manganese
- Copper
- Iron
- Boron
- Aluminum
- Molybdenum

Chloride
Sulfate
Foreign matter content
Pathogens (Fecal coliforms and Salmonella sp.), if manures were composted
Maturity test (i.e. Solvita Test)

The cost for the test listing above would cost under $100 at the Michigan State University Soil and Plant Nutrient Lab. Once consistent results are achieved testing could be done on a less frequent basis. Results of testing and use instructions should be given to the end user of the finished compost so that the compost can be used in the most efficient manner. Please contact your local Michigan State University Extension office for assistance on appropriate testing parameters. Testing results of finished compost should NOT be sent to the DEQ as part of your yearly reporting requirements but it should be made available to staff during a site inspection if they ask for it.