

How to Comply with the New Nutrient Runoff Law

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If you did not know the Dishwasher Detergent and Nutrient Runoff Law (Chapter 205, laws of 2010) was signed into law by the Governor Patterson on July 15, 2010. The justification and purpose of this law is to improve water quality in New York by reducing phosphorus runoff into the State's water bodies. By passing this bill New York State also hopes to reduce costs to local governments and private entities that are required to remove excess phosphorus from stormwater and wastewater, and to improve recreational uses of the state's waters.

According to NYSDEC "phosphorus enters the environment in many ways. Wastewater treatment plants, defective septic systems, agricultural runoff, fertilizer, manure, decomposing leaves, and urban/suburban runoff all contributes phosphorus to the environment. Phosphorus going into the State's water has been linked to: reductions in oxygen in water bodies necessary for fish to breathe; algae that turn water bodies green; and algae and algae by-products that degrade drinking water. Over 100 water bodies in New York are impaired due to phosphorus including: the East of Hudson in the New York City Watershed; Lake Champlain; Onondaga Lake; Cayuga Lake; parts of Lake Ontario; and the Chesapeake Bay watershed".

Research conducted by lab over the past decade has shown that turf receiving phosphorus containing fertilizers has less phosphorus runoff than non-fertilized turf except when site has high runoff conditions of wet-poorly drained soils due to a high water table, bedrock near the surface or during prolong periods of high rainfall.

This law pertains to both those who apply fertilizer and those who sell fertilizers to all turf sites except sod farms which this law does not pertain to. Let's look at the law and how best to comply with the law:

1. The law is in effect on January 1, 2012
2. Prohibits the use of phosphorus-containing lawn fertilizer unless:
 - establishing a new lawn including the first growing season or
 - a soil test shows that the lawn does not have enough phosphorus.

The definition of a "Phosphorus fertilizer" means fertilizer in which the available phosphate (P205, second number on the bag) content is greater than 0.67 percent by weight, excluding compost.

3. Prohibits the application of lawn fertilizer on impervious surfaces and requires pick up of fertilizer applied or spilled onto impervious surfaces.
4. Prohibits the application of lawn fertilizers within 20 feet of any surface water except:
 - where there is a continues vegetative buffer of at least 10 feet; or
 - where the fertilizer is applied by a device with a spreader guard, deflector shield or drop spreader at least three feet from surface water
 - this does not apply to sites being established

-this is for all fertilizers not just ones that contain phosphorus

5. Prohibit the application of lawn fertilizer between December 1st and April 1st
6. Any retailer selling or offering for sale phosphorus fertilizer for use on turf shall comply with the retail sale requirements of law related to display of phosphorus fertilizer and the posting of educational signs that contain the above information.
7. A local government may enact more stringent standards for the application of fertilizer for turf than this law, provided, however, that any local government that enacts such standards after January 1, 2011 must demonstrate to the NYSDEC prior to enactment that additional or more stringent standards are necessary to address local water quality conditions.
8. Penalties: any person who violates any provision of this law shall be liable for a civil penalty not to exceed five hundred dollars for a first violation, and not to exceed one thousand dollars for each subsequent violation. Any owner or owner's agent, or occupant of a household who violates any provision of this law shall for a first violation be issued a written warning and be provided educational materials. Upon a second violation, they will be liable for a civil penalty not to exceed one hundred dollars, and for any subsequent violations shall be liable for a civil penalty not to exceed two hundred fifty dollars. No owner or owner's agent of a household shall be held liable for any violation by an occupant.

It is easy to comply with the law by following a few simple steps:

Soil test: First and foremost have your soil tested to determine if phosphorus is needed to have healthy turf. The law does not state on how to have the soil tested or where but if you going to spend money on testing it is good to have it done by a certified lab, a lab that makes phosphorus fertilizer recommendations and that the recommendations are based on turf response research conducted in the past decade. There are both public and private labs that can do testing of this nature. The only NY based public lab is a partnership between Cornell University and AgroOne (see <http://www.dairyone.com/AgroOne/default.htm>) where AgroOne is responsible for the testing and Cornell makes the recommendation based on turf response research. There will be a less expensive test (\$7 instead of \$12 for the expanded test) offered that only determines phosphorus and pH (use Form H).

Based on soil samples we have received at the Cornell, most lawns in NY a have adequate levels of phosphorus to support a healthy lawn. Therefore, many turf sites need little or no phosphorus anyway.

Don't fertilize hard surfaces: If you do not want have to pick up any fertilizer (not just phosphorus containing fertilizer) you apply to impervious surfaces (roads, sidewalks, driveways, etc), then use spreaders that are more easily to control where the fertilizer is applied. This includes drop spreaders, or spreaders with a guard or deflector shield. If there is low wind conditions that do not cause drift, sprayers may also be an effective way to control the application of fertilizer.

When you are near surface water: If there is not a vegetative buffer of at least 10 feet add one near surface water (streams, lakes, rivers). The law does not specify what a continuous vegetative buffer is; it could even mean a non-phosphorus fertilized turf. You can fertilize within 3 feet of surface water if the fertilizer is applied by a device with a spreader guard, deflector shield or by using a drop spreader. Be careful with fertigation system if the application of nutrient containing irrigation water either directly

within the 20 foot buffer zone or if windy where drift can occur.

Do not make an application of lawn fertilizer between December 1st and April 1st: This refers to all fertilizers not just ones that might contain phosphorus including fertilizers derived from compost.

Compost based fertilizers: Fertilizers that are derived from composts may be applied to all turf sites between April 1st and November 30th except with 20 feet of surface water as noted above. We have observed however that compost (especially ones from manure) can often contain high amounts of phosphorus that can eventually result in soils that are very high in phosphorus and have very high amounts of phosphorus runoff from turf sites. Use soil tests as a guide, if soils are already high in phosphorus consider not applying compost based fertilizers if they contain much phosphorus.

What if I still have phosphorus containing fertilizer (> than 0.67% P₂O₅), can I use them? The law allows you to continue to use phosphorus fertilizer on lawn and nonagricultural turf after January 1, 2012, if the fertilizer was purchased prior to July 28, 2010, the effective date of the law. The law was passed about a year and a half before it has become effective which should have given ample time to use up all the fertilizer you had purchased.

Know your local law, if they exist they will be more restrictive: laws have been adopted in Westchester, Nassau, Suffolk, Rockland and Chautauqua Counties and the Village of Greenwood Lake. Other municipalities are considering similar more restrictive laws. If you live or commercially apply fertilizing in those counties (and Village of Greenwood Lake) then become familiar with their laws and what is more restrictive than the state law