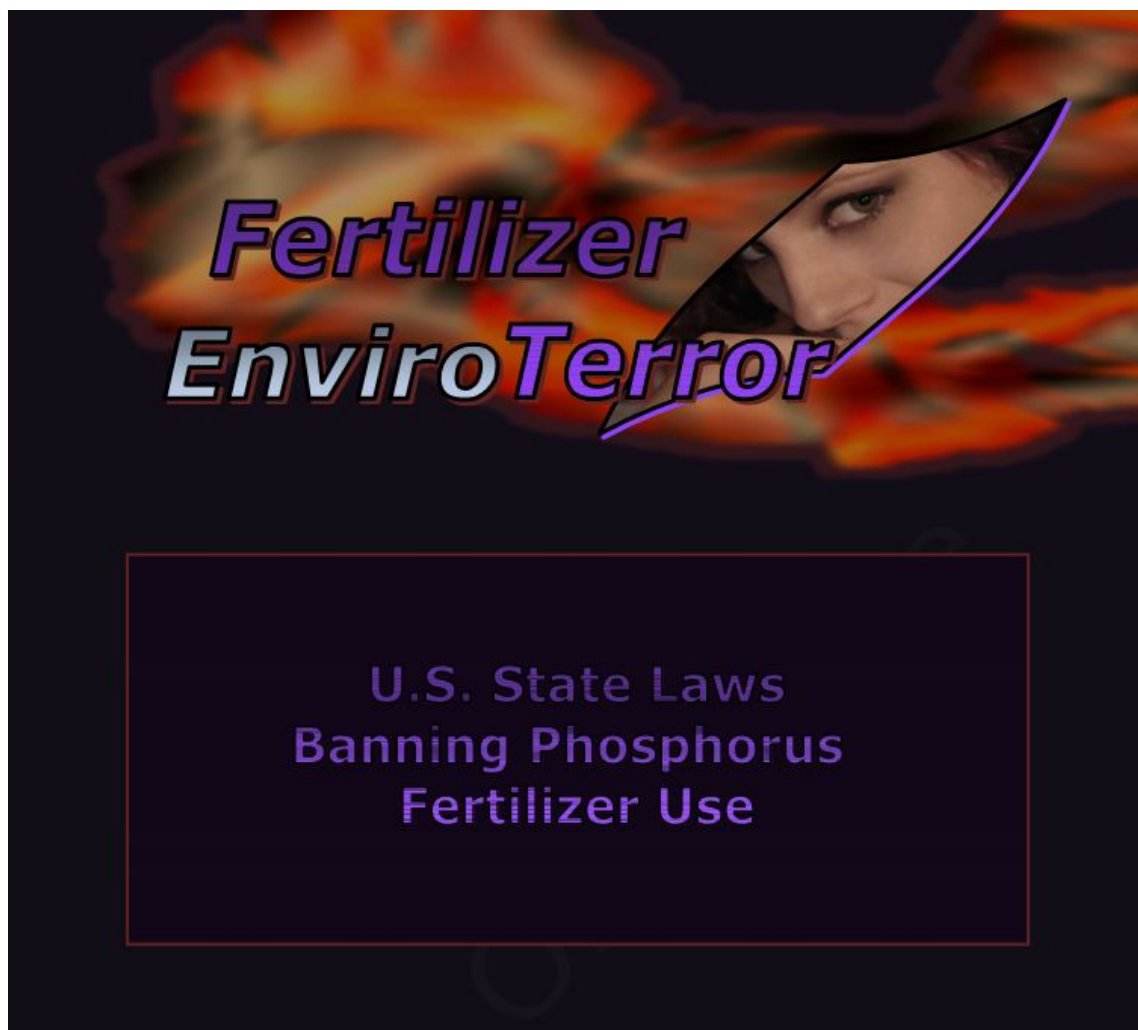


Pesticide Truths

Fertilizer Ban – Anti-Phosphorus Prohibition in America – State Laws Banning Phosphorus Fertilizer Use – 2012 02 01

April 28, 2012 WILLIAM H GATHERCOLE AND NORAH G



Report from the State of Connecticut.

Summary

Phosphorus is a naturally occurring mineral nutrient that is necessary for plant growth.

It is an essential part of photosynthesis and helps plants to mature properly.

But high phosphorus levels in water bodies can lead to excessive algae and aquatic plant growth which can harm aquatic life and impair recreational use.

It can cause toxic algae blooms, reduce water clarity, and deplete oxygen levels.

Low water oxygen levels can stress or kill fish and other aquatic animals, among other things.

Turf phosphorus fertilizers are NOT a major source of phosphorus pollution, and yet, since 2002, ELEVEN U.S. states have PROHIBITED phosphorus fertilizer use or sale under the MISGUIDED PRETEXT of somehow protecting the environment.

Generally, these laws PROHIBIT phosphorus fertilizer application unless it is for ...

- (1) curing a lack of necessary phosphorus,
- (2) establishing new turf, or
- (3) repairing turf.

Many also EXEMPT agricultural uses, commercial or sod farms, gardening, and golf courses.

Most of the states PROHIBIT fertilizer application on impervious, frozen, or saturated surfaces.

Other provisions included in some states' laws are ...

- (1) setbacks from water bodies such as lakes or rivers, and
- (2) sales restrictions such as displaying phosphorus fertilizer separately from other types of fertilizers and posting cautionary information.

A TWELFTH state, Florida, requires certain local governmental units to adopt a model ordinance restricting fertilizer use and encourages other units to do the same.

The model ordinance bans applying fertilizer containing nitrogen or phosphorus during a « *prohibited application period* ».

Environmental Concern

Nutrients such as phosphorus and nitrogen are essential, naturally occurring elements for plant growth, but increased levels of these nutrients can jeopardize water quality.

Sewage discharges and AGRICULTURAL fertilizer runoff containing phosphorus contribute to increased nutrient water levels.

Runoff or leaching into groundwater can occur when fertilizer is applied at times when ...

- (1) it can be removed by rainfall or snowmelt, or
- (2) land or crops cannot absorb the nutrients.

High concentrations of phosphorus or nitrogen in water bodies can lead to excessive algae and aquatic plant growth (a process called eutrophication) which can impair aquatic life and recreational use.

It can cause algae blooms, reduce water clarity, and deplete oxygen levels that can stress or kill fish and other aquatic animals (a condition called hypoxia).

According to a Virginia Cooperative Extension report discussing environmental impacts from AGRICULTURAL phosphorus use, eutrophication can ...

(1) cause fish kills or harm wildlife and livestock by reducing water oxygen content or producing toxins and

(2) increase the cost and difficulty of drinking water purification.

Decaying algae also produces surface scum, odor, and leads to increased insect populations.

A 2010 interagency report of the National Science and Technology Council's Committee on Environment and Natural Resources (in which the U.S. Environmental Protection Agency (EPA) participated) warns that declining oxygen levels in U.S. waters are forming low-oxygen « dead zones » and destroying habitats.

In Region 1 specifically (which includes Connecticut), EPA requires wastewater discharge permits to include phosphorus limits where a discharge may degrade water quality.

Connecticut's Department of Energy and Environmental Protection (DEEP) identifies nutrient enrichment as a major water quality issue, highlighting the fact that EPA has emphasized aggressive action to limit phosphorus discharge to surface waters.

According to DEEP, there are 21 identified water body segments in the State of Connecticut where nutrient enrichment is contributing to water impairment.

Phosphorus Fertilizer Bans

At least ELEVEN states PROHIBIT phosphorus fertilizer use or sale —

Illinois
Maine
Maryland
Michigan
Minnesota
New Jersey
New York
Vermont
Virginia
Washington

Wisconsin

In general, these states PROHIBIT phosphorus fertilizer application unless it is for ...

- (1) curing a lack of necessary phosphorus,
- (2) establishing new turf, or
- (3) repairing turf.

Many states EXEMPT agricultural lands and production, commercial or sod farms, gardening, or golf courses from Anti-Phosphorus PROHIBITION.

And many PROHIBIT applying fertilizer (not only phosphorus fertilizer) on impervious, frozen, or saturated surfaces, or within a certain distance of a water body.

Inadvertent application on impervious surfaces must be removed or cleaned up.

Some states also have phosphorus fertilizer sale restrictions such as separately displaying phosphorus fertilizer and posting cautionary information.

Comparison of Phosphorus Bans

The next segments summarize the primary elements of each state's Anti-Phosphorus PROHIBITION.

The segments do not provide enforcement and penalty information or discuss applying certain manures to land or soil, which many states allow.

Some of these state LAWS PROHIBIT LOCAL GOVERNMENTAL UNITS FROM ADOPTING MORE RESTRICTIVE REQUIREMENTS, with some exceptions.

And some laws require the state to provide consumers with information such best practices for phosphorus lawn fertilizer and restrictions on use.

State of Florida

Florida state law requires certain counties and municipalities located in nutrient-impaired watersheds to adopt the state's model ordinance for any fertilizer use in urban landscapes and may adopt more stringent standards if certain conditions are met.

The law encourages other counties and municipalities to adopt the ordinance or an equivalent.

Among other things, the Model Ordinance for Florida-Friendly Fertilizer Use on Urban Landscapes ...

- (1) establishes fertilizer content and application rates,
- (2) PROHIBITIONS applying fertilizer containing phosphorus or nitrogen to saturated soils, impervious surfaces, or during a « prohibited application period »,
- (3) establishes a three-foot to ten-foot setback for application near water sources such as streams, lakes, or wetlands, and
- (4) exempts agriculture.

State of Illinois — Anti-Phosphorus PROHIBITION

Year passed / effective date —

October 20th, 2010.

Applicators affected —

« *Applicator for hire* » (licensed commercial, certified applicators, and others).

Exempt applicators and allowed phosphorus fertilizer use —

Golf courses. Commercial and sod farms. Agricultural lands and production. Right-of-ways. Phosphorus deficiency. Establish new turf. Lawn repair.

Application to paved or impervious surfaces —

Prohibited, must clean up if inadvertent.

Setbacks from water (buffer zone) —

3-foot to 15-foot setback.

Application on frozen and saturated soils —

Prohibited.

Restrictions on phosphorus lawn fertilizer sales —

No restrictions.

State of Maine — Anti-Phosphorus PROHIBITION

Year passed / effective date —

2007 / 2008.

Applicators affected —

All persons.

Exempt applicators and allowed phosphorus fertilizer use —

Agriculture. Phosphorus deficiency. Establish new turf. Sod farms. Turf repair. Gardening.

Application to paved or impervious surfaces —

No restrictions.

Setbacks from water (buffer zone) —

None.

Application on frozen and saturated soils —

No restrictions.

Restrictions on phosphorus lawn fertilizer sales —

Post signs about fertilizer use at point of sale.

State of Maryland — Anti-Phosphorus PROHIBITION

Year passed / effective dates —

2011 / 2011-2013.

Applicators affected —

Everyone.

Exempt applicators and allowed phosphorus fertilizer use —

Agricultural purposes. Commercial and sod farms. Phosphorus deficiency. Establish new turf. Turf repair.

Application to paved or impervious surfaces —

Prohibited.

Setbacks from water (buffer zone) —

10-foot to 15-foot setback.

Application on frozen and saturated soils —

Prohibited from November 16 to February 29, or on frozen ground.

Restrictions on phosphorus lawn fertilizer sales —

Must sell low phosphorus fertilizer for lawns unless organic and sold to professional.

State of Michigan — Anti-Phosphorus PROHIBITION

Year passed / effective date —

2010 / 2012.

Applicators affected —

All persons.

Exempt applicators and allowed phosphorus fertilizer use —

Golf courses. Commercial farm land. Phosphorus deficiency. Establish new turf.

Application to paved or impervious surfaces —

Must clean up if applied.

Setbacks from water (buffer zone) —

3-foot to 15-foot setback.

Application on frozen and saturated soils —

Prohibited.

Restrictions on phosphorus lawn fertilizer sales —

No restrictions.

State of Minnesota — Anti-Phosphorus PROHIBITION

Year passed / effective date —

2002 / 2004.

Applicators affected —

All persons.

Exempt applicators and allowed phosphorus fertilizer use —

Golf courses. Sod farms. Agricultural lands and production. Phosphorus deficiency. Establish new turf.

Application to paved or impervious surfaces —

Prohibited, must clean up if applied.

Setbacks from water (buffer zone) —

None.

Application on frozen and saturated soils —

No restrictions.

Restrictions on phosphorus lawn fertilizer sales —

No restrictions.

State of New Jersey — Anti-Phosphorus PROHIBITION

Year passed / effective dates —

2010 / 2011-2013.

Applicators affected —

All persons.

Exempt applicators and allowed phosphorus fertilizer use —

Golf courses. Commercial Farms. Phosphorus deficiency. Establish new turf. Turf repair.

Application to paved or impervious surfaces —

Prohibited, must clean up if inadvertent.

Setbacks from water (buffer zone) —

10-foot to 15-foot setback.

Application on frozen and saturated soils —

Prohibited during heavy rain or when predicted, on saturated or frozen ground, or from November 16 to February 29 (December 2 to February 29 for professionals).

Restrictions on phosphorus lawn fertilizer sales —

Sale prohibited to consumers unless for deficiency, new turf, or turf repair.

State of New York — Anti-Phosphorus PROHIBITION

Year passed / effective date —

2010 / 2012.

Applicators affected —

All persons.

Exempt applicators and allowed phosphorus fertilizer use —

Gardens. Agricultural lands and production. Sod farms. Phosphorus deficiency. Establish new turf.

Application to paved or impervious surfaces —

Prohibited, must clean up if applied.

Setbacks from water (buffer zone) —

3-foot to 20-foot setback.

Application on frozen and saturated soils —

Prohibited between December 1 and April 1.

Restrictions on phosphorus lawn fertilizer sales —

Display phosphorus fertilizer separately. Post educational signs.

State of Vermont — Anti-Phosphorus PROHIBITION

Year passed / effective dates —

2011 / 2011-2012.

Applicators affected —

All persons.

Exempt applicators and allowed phosphorus fertilizer use —

Golf courses. Sod farms. Agricultural lands and production. Phosphorus deficiency. Establish new turf.

Application to paved or impervious surfaces —

Prohibited, must clean up if applied.

Setbacks from water (buffer zone) —

25-foot setback.

Application on frozen and saturated soils —

Prohibited from October 16 to March 31, or on frozen ground.

Restrictions on phosphorus lawn fertilizer sales —

Display Phosphorus fertilizer separately. Post educational signs.

State of Virginia — Anti-Phosphorus PROHIBITION

Year passed / effective date —

2011 / 2013.

Applicators affected —

All persons.

Exempt applicators and allowed phosphorus fertilizer use —

Phosphorus deficiency. Establish new turf. Turf repair. Agricultural use. Gardening. Golf courses management plan.

Application to paved or impervious surfaces —

Package label prohibits certain uses.

Setbacks from water (buffer zone) —

None.

Application on frozen and saturated soils —

Package label prohibits certain uses.

Restrictions on phosphorus lawn fertilizer sales —

Sale of lawn maintenance fertilizer prohibited. Can sell existing stock.

State of Washington — Anti-Phosphorus PROHIBITION

Year passed / effective date —

2011 / 2013.

Applicators affected —

All persons.

Exempt applicators and allowed phosphorus fertilizer use —

Establish new turf. Turf repair. Phosphorus deficiency. Gardens. Sod farms. Agricultural land or production.

Application to paved or impervious surfaces —

Prohibited.

Setbacks from water (buffer zone) —

None.

Application on frozen and saturated soils —

Prohibited on frozen ground.

Restrictions on phosphorus lawn fertilizer sales —

Sale prohibited unless for an allowed use and properly labeled. Can sell existing stock.

State of Wisconsin — Anti-Phosphorus PROHIBITION

Year passed / effective date —

2009 / 2010.

Applicators affected —

All persons.

Exempt applicators and allowed phosphorus fertilizer use —

Sod farms. Agricultural land and production. Phosphorus deficiency.
Establish new turf.

Application to paved or impervious surfaces —

Prohibited, must clean up if inadvertent.

Setbacks from water (buffer zone) —

None.

Application on frozen and saturated soils —

Prohibited on frozen ground.

Restrictions on phosphorus lawn fertilizer sales —

No display but may post sign. Must sell only for specific purposes.

**Turf fertilizers are
NOT a major source of
phosphorus pollution**

**PROHIBITION has NOT,
and will NOT, help
reduce phosphorus
loading in lakes**

Description of Phosphorus in the Soil

Phosphorus is a plant macro-nutrient that is very immobile in the soil.

The relationship of phosphorus with other nutrients is affected by the soil pH level.

At low soil pH, calcium-phosphate will predominate. at high pH, iron and aluminum-phosphates are more dominant.

Benefits of Phosphorus

The benefits of phosphorus to turfgrass growth will include the following —

- Stimulating root growth and development during the seedling stage
- Accelerating turf maturity and establishment
- Improving wear tolerance
- Improving seed formation for reproduction

Roles of Phosphorus in the Plant

Phosphorus plays a vital role in use of the energy sources used by the plant.

It is also a key ingredient found in the cell nucleus.

Deoxyribo-Nucleic Acid (DNA) uses phosphorus to transfer inherited characteristics.

Other Roles of Phosphorus in Turfgrass Growth Processes

- Cell division
- Energy transformation
- Releasing energy from the breakdown of carbohydrates
- Transferring those characteristics needed for inheritance

Sources of Phosphorus Pollution in Lakes and Rivers

- Agricultural phosphorus fertilizer that is soil injected for corn germination
- Anti-ice compounds, such as de-icing chemicals and road sand
- Excrement from urban pets, such as dogs and cats
- Excrement from waterfowl, such as geese
- Industrial discharges
- Laundry soap and dishwashing machine detergents
- Septic tank systems that are leaking and/or improperly installed
- Soil erosion from freshly-ploughed (tilled) agricultural land
- Soil erosion from urban construction sites
- Tree and shrub leaves that drop in the autumn months
- Waste water originating from urban treatment plants
- Turf phosphorus fertilizers are NOT a major source of phosphorus pollution

For a copy of the original Force Of Nature Report, go to the following link ...

<http://pesticidetruths.com/wp-content/uploads/2011/12/Force-Of-Nature-U.S.-Terrorism-2012-02-01-Fertilizer-TERROR-State-Laws-Banning-Phosphorus-Fertilizer-Use-pdf-300-dpi.pdf>

For more on AMERICA & ENVIRO-TERROR, go to ...

U.S. ENVIRONMENTAL TERRORISM – STATE PRE-EMPTION

<http://wp.me/P1jq40-2hW>

U.S. ENVIRONMENTAL TERRORISM – HIGHLAND PARK, ILLINOIS

<http://wp.me/P1jq40-3yC>

For THE COMPLETE LIBRARY OF REPORTS & REFERENCES, go to ...

<http://wp.me/P1jq40-2rr>

Fertilizer Terror
NEVER Ends



William H. Gathercole & NQ&A | force.of.de.nature@gmail.com | Force Of Nature