Chairman Causer, Democratic Chair Pashinski and members of the Agriculture and Rural Affairs Committee, thank you for the opportunity to offer testimony today on SB 792, legislation to regulate the application of fertilizer.

I represent the Pennsylvania Landscape & Nursery Association (PLNA), the leading trade association representing Pennsylvania’s $6.8 billion green industry. Its member landscape contractors, retail garden centers, wholesale nurseries and greenhouses produce outdoor living environments that improve economic value, air quality, water quality and human health.

At the outset, I want to recognize the efforts of Secretary Redding, Deputy Secretary Strathmeyer and the other professionals at the Department of Agriculture for working with the industry to craft legislation that minimizes the potential impact on the professional lawn care industry. The amendments that were incorporated into the current bill by the Senate were the result of a cooperative effort by the Department and the industry. We commend PDA for their openness and willingness to work with us in smoothing out some of the more objectional parts of the legislation.

While we now have a bill that is less objectionable than the prior bill language, our Association continues to question the need for this bill at all, particularly those parts that regulate turf grass fertilizer and the professionals who apply it for a living.

There are three major reasons for our concerns:

First, based upon the scientific research regarding turf grass fertilization and EPA’s own Expert Panel Report, the bill will have no impact on water quality in the Bay watershed and may even make conditions worse. Second, the bill will impose real costs in the millions of dollars on Pennsylvania’s lawn care industry, which is comprised mostly of small businesses. Third, given the recent statement of EPA, Pennsylvania is unlikely to receive any credit for this legislation in meeting Pennsylvania’s 2025 Chesapeake Bay goals.

**A Healthy Lawn Equals a Healthy Bay**

We question whether the bill, although well-intentioned, will actually improve water quality in the Chesapeake Bay. Our doubt is based upon the scientific research that has been conducted on the dynamics of fertilizer applied to turf grass. After reviewing the scientific research done by Penn State and other land grant universities, we believe that this legislation could actually make conditions in the Chesapeake Bay worse.

**EPA: Maintain a Dense Vegetative Cover of Turf Grass**

In 2012, EPA convened a panel of experts to gather all the scientific research and consider the question of the impact of fertilizers applied to turf grass on water quality in the Chesapeake Bay watershed. Their
findings were published in March of 2013 in what I will refer to as the “Expert Panel Report.” This report is a seminal work in evaluating the impact of turf grass fertilization on water quality.

One of major recommendations coming from this Expert Panel Report is:

“Maintain a dense vegetative cover of turf grass to reduce runoff, prevent erosion, and retain nutrients.

“The research demonstrates that dense vegetative cover helps to reduce surface runoff which can be responsible for significant nutrient export from the lawn, regardless of whether it is fertilized or not. Dense cover has been shown to reduce surface runoff volumes in a wide range of geographic settings and soil conditions.

“If a lawn does not have a dense cover, it has an elevated risk for nutrient export, especially if soils are compacted or slopes are steep.” (pg. 29)

A Healthy Lawn Equals a Healthy Bay

In short, a healthy lawn equals a healthy Bay. Here is why.

The three major pollutants that we are concerned about for Bay health are nitrogen, phosphorus and sediment. The research shows that nitrogen, when properly applied to turf grass does not move from the site where it is applied.

Nitrogen is essential to a healthy, green lawn. When you have a healthy green lawn, phosphorus, which is naturally occurring in most Pennsylvania soils, is held in check by the healthy turf grass cover. The same with the small soil particles that make up sediment.

When turf grass cover is spotty and weak, exposed soils will erode, carrying phosphorus and sediment along with rain water into storm drains, rivers and streams.

PLNA Endorses EPA Recommendations for Turf Grass Management

There are nine other recommendations for Bay-friendly turf grass management in the EPA Expert Panel Report, which we, as an industry, endorse. Our time limitations prevent me from going into all of them, but I have provided copies of EPA’s Expert Panel Report to committee members for background.

Are Our Lawns Healthy in the Bay Watershed?

So, if a healthy lawn equals a healthy Bay, how are we doing in the Chesapeake Bay watershed? Are we keeping our lawns healthy?

Penn State, with one of the premier turf grass research programs in the country, recommends that lawns in Pennsylvania receive about four pounds of nitrogen per 1,000 square feet per growing season. These four pounds must be divided and applied in at least four or more smaller applications throughout the growing season to achieve that healthy green lawn that EPA says will reduce harmful runoff into the Chesapeake Bay.

Lawns in the Bay Watershed are Under-Fertilized
According to this standard, the scientific research cited in EPA’s Expert Panel Report shows that lawns in the Chesapeake Bay watershed are under-fertilized, on the whole, by as much as 77% (page 34).

Half of all lawns in the watershed receive no fertilizer at all.

The 45% of lawns in the watershed being maintained by do-it-yourself homeowners receive only 1.7 applications of fertilizer per season. At this rate, given current recommended application rates specified on bagged lawn fertilizers that you can pick up at your local garden center or big box home improvement center, the average lawn being maintained by a do-it-yourself homeowner receives between 1.4 and 1.7 pounds per 1,000 square feet of nitrogen per season. This is short of the 4 pounds per 1,000 square feet recommended by Penn State for the healthy, dense vegetative cover that EPA says protects water quality.

Lawn care Professionals Maintain Less than 5% of Bay Watershed Lawns

Lawn care professionals maintain less than 5% of all lawns in the Bay watershed, according to EPA. The Expert Panel Report also points out that professional lawn care companies apply fertilizer in four to five smaller doses over the season, which is an environmentally better way to apply fertilizers and consistent with EPA recommendations.

Lawn care professionals also have no economic incentive to use more fertilizer than necessary to produce a thick, green lawn. Fertilizer is expensive, and its application is closely monitored by professionals.

Reducing turf grass fertilization further, as called for in this bill, could do more harm to the Bay than good, increasing runoff of phosphorus and sediment.

Voluntary Reductions in Phosphorus Use

The voluntary efforts of the industry have led to a reduction in phosphorus use in Pennsylvania between 2006 and 2010 of 82% (page 16). It is very likely that more recent data will show further phosphorus reductions since 2010, as the lawn fertilizer industry continued to phase out phosphorus in bagged lawn fertilizers sold to the public. Commercially available bagged lawn fertilizers now contain no phosphorus, except for those designated for use as new lawn fertilizer.

Costs to Small Businesses

As I mentioned earlier, we recognize the efforts of the professionals in the Department of Agriculture for working with us to minimize the impact of this bill, should it become law.

Nonetheless, there are direct costs that will be borne by the lawn care industry. Those costs include the fees associated with the new registration requirements for both businesses and individual applicators; the cost of recordkeeping, administration and monitoring associated with these new requirements; the time lost to training employees to maintain certification requirements; and the direct cost of the training and travel costs.

“Another Brick in the Wall”
As we have worked with legislators and staff on this bill over the year, I’ve heard the comment that “The costs aren’t that much.” Perhaps when viewed in isolation they may seem small, but when these costs are added to other compliance costs, such as complying with the Plant Pest Act, the Pesticide Control Act, the Home improvement Contractor Act, OSHA requirements, US DOT and PennDOT requirements and the myriad of other state and federal laws and regulations our members contend with in trying to run a small business, it adds up.

In discussing this with one of our members a few months ago, he said to me, quoting Pink Floyd, “It’s just another brick in the wall.”

We estimate that, if enacted and every business now doing lawn care services complies, this law will cost the lawn care industry as a whole at $5 million per year in compliance costs. These costs are balanced against a bill that produces no environmental benefit and perhaps even a negative benefit.

**Enforcement Capacity of Our Department of Agriculture**

Adding to the concern of the cost of implementing this proposed bill is the way that these costs will fall on individual companies.

Because the entry barriers to starting a lawn care business are relatively low and enforcement of laws pertaining to the industry are lax, the costs of a new law fall most heavily on those companies that are upstanding and trying to be good citizens: generally speaking, PLNA members. Our members while they bear the costs of complying with environmental, pesticide and worker safety regulations, many of their competitors do not and seldom pay a price for this lawlessness.

As an industry, we work very well with the Department of Agriculture, which is the primary agency regulating us. We appreciate their professionalism and openness to our concerns. We want a strong PDA that can create a level playing field for all in our industry.

We have been concerned, however, about the erosion of their capacity to carry out their responsibilities over the past decade of budget and staff cuts. At the same time, an influx of new plant pests such as the emerald ash borer and the spotted lanternfly have stretched the remaining staff to the breaking point.

Our members complain about the lack of enforcement presence in the field and how operators without nursery dealer’s licenses or pesticide registrations do business with impunity. We seriously question whether PDA has the capacity to take on yet another new program, such as that proposed in this bill.

We are working with PDA to try to come up with creative solutions to this problem and have provided them with some of our preliminary ideas about how we can work together on enforcement issues. But enforcement takes manpower, and PDA just does not have it.

**EPA Credit toward 2025 Goals for this Bill is Ephemeral**

In an email to Secretary Redding last March, Matthew E. Johnston, Senior Policy Analyst, Chesapeake Bay Program Office laid out two conditions for Pennsylvania to receive credit for goal achievement for 2025.

1. Pennsylvania could include the legislation as part of its Phase III Watershed Implementation Plan. Doing so would allow Pennsylvania to plan for modeled nitrogen and phosphorus pollution...
reductions from all pervious acres within Pennsylvania’s portion of the Chesapeake Bay Watershed.

2. Pennsylvania would be expected to provide fertilizer sales information through 2025 to verify that reductions in nitrogen and phosphorus sales took place, as planned for in the Phase III Watershed Implementation Plan. Any verified reductions in sales would then translate into realized, modeled nitrogen and phosphorus pollution reductions from all pervious acres within Pennsylvania’s portion of the Chesapeake Bay Watershed.

While we are confident that our Department of Environmental Protection would include this bill, if enacted, in Pennsylvania’s Phase III Watershed Implementation Plan, we doubt that a reduction in sales of nitrogen fertilizer would occur.

First, as outlined my prior testimony, based on EPA’s Expert Panel Report, lawns in the Bay watershed are now under-fertilized to optimize the ability of the turf grass to inhibit phosphorus and sediment runoff.

Second, if the nitrogen fertilization of lawns is actually reduced, it will lead to an increase in phosphorus and sediment runoff, as the turf grass weakens and soils erode.

Third, nitrogen, when applied responsibly to turf grass, does not move from the site where applied and increases the phosphorus and sediment holding capacity of the soil.

In short, we should be encouraging increased responsible use of fertilizer on those lawns needing it. Using a gross sales number to evaluate the effectiveness of Pennsylvania’s goal attainment is crude and, in this case, inversely related to water quality improvements!

Recommendations

We have several recommendations for the Committee’s consideration if this bill moves forward.

1. Keep Subchapter B, Fertilizer Manufacturers and Guarantors. Contained in this section are increased fees that PDA requires to maintain this program. These increased fees will no doubt be passed along to those using fertilizers commercially and privately, but we think it’s a small price to pay to maintain PDA’s capacity to manage and enforce this program.

2. Drop Subchapters C and D relating to Applicator Licensing, Certification and Recordkeeping. Most of what is covered in this section is already a part of the current Pesticide Control Act. Operators who apply fertilizer are already covered since turf grass fertilizers typically contain pesticides that require applicator certification, training and registration. Few professionals, if any, apply only turf grass fertilizer. These chapters are redundant of what and who PDA currently regulates.

3. We are ambivalent about Subchapter E on Application Rates, Requirements and Prohibitions. The industry broadly is already in substantial compliance with this section. In a recent survey PLNA conducted of bagged fertilizers available in central Pennsylvania, most bagged fertilizers available to the general public are now labeled for application rates below the 0.9 pounds per
1,000 square feet in the bill and the couple that are above that are below 1.0 pound per 1,000 square feet. All, except those for new lawn development, have no phosphorus. All meet the minimum for slow release nitrogen set at 22% in the bill, with some as high as 50%. If this section is implemented, there will be little or no impact on the current market place.

4. We agree with Subchapter F that a program on Agriculture and Homeowner Education could be a good thing. However, the committee should recognize that EPA, in its Expert Panel Report, could find no research that supported the efficacy of a public or industry education program (pg. 35).

5. We support Subchapter G Administration and Penalties, Section 6887 Exclusion of local laws and regulations. This section will prevent a patchwork of local ordinances from springing up regulating fertilizer use.

The Pennsylvania Landscape & Nursery Association thanks the Committee for your consideration of our concerns.

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