Economic Impact Analysis
Virginia Department of Planning and Budget

18 VAC 145-20 – Professional Soil Scientists Regulations
Board for Professional Soil Scientists and Wetland Professionals
June 19, 2012

Summary of the Proposed Amendments to Regulation

Pursuant to Chapters 777 and 859 of the 2011 Acts of the General Assembly, the Board for Professional Soil Scientists and Wetland Professionals proposes 1) to change the current certification program to a licensure program, 2) to add continuing education requirements, and 3) to replace the state licensure examination with the national licensure examination.

Result of Analysis

There is insufficient data to accurately compare the magnitude of the benefits versus the costs. A detailed analysis of the benefits and costs can be found in the next section.

Estimated Economic Impact

Chapters 777 and 859 of the 2011 Acts of the General Assembly change the current soil scientist program from certification to licensure. Pursuant to the statutory mandate, the Board for Professional Soil Scientists and Wetland Professionals (the Board) will start issuing licenses on July 1, 2013. Individuals with certification as of July 1, 2013 will be eligible for grandfathering until July 1, 2015. According to the Department of Professional and Occupational Regulation (DPOR), there are 133 certified soil scientists in Virginia and the membership in the Virginia Association of Professional Soil Scientists is estimated to be about 200.

The main economic effect of these proposed regulations stem from the fact that a certification program is voluntary while a licensure program is mandatory. Under a certification program, a soil scientist does not have to have certification to practice, but may choose to obtain certification to signal that he or she is competent. Under a licensure program, on the other hand, a soil scientist is prohibited from practice unless he or she holds a valid license. In short, the

proposed licensure program represents a much stronger form of regulation than the current certification program.

It appears that the main goal of switching to a stronger form of regulation is to offer the public increased protection against risks that may be posed by incompetent practices. For example, work of a soil scientist may put the quality of groundwater and surface water at risk, or may threaten the integrity of structures and viability of agricultural resources. In other words, the licensure is hoped to help maintain a certain service quality so that the risks are minimized.

However, the proposed switch from certification to licensure makes it also possible to restrict entry of new soil scientists into the profession. Any type of barriers to entry into an occupation would generally be expected to promote monopolistic behavior which usually leads to reduced competition, higher prices, reduced production, and consequently, reduced consumer choice.

Empirical literature on the economic effects of occupational licensure versus certification is very limited. And, limited available research does not seem to support the notion that stricter licensure improves quality in the long run. A fairly recent comprehensive study[1] offers some insights into the likely economic effects by comparing data from Wisconsin, which licensed certain healthcare occupations, such as physical therapists, respiratory care providers, and physician assistants and data from Minnesota, which certified the same occupations.

The study finds some support that licensing has positive impacts immediately following its implementation as the occupation initially focuses on quality through the standardization of the quality of the service, but in the long term, the focus may have shifted toward restriction of supply of services through entry tests and other legal barriers that can limit the number of practitioners who enter the occupation. This research finds no meaningful difference, in the long term, in consumer complaints between Wisconsin and Minnesota, but finds evidence from other data sources that licensing drives up prices and earnings in the regulated profession. Thus, whether the focus in the long term will be on quality or restriction of supply would determine actual economic effects of the proposed stronger form of regulation for the soil scientists.

[1] Kleiner, Morris M. 2006. "Licensing Occupations: Ensuring Quality or Restricting Competition?" Upjohn Institute for Employment Research. Kalamazoo, Michigan.

As per the statutory mandate, the Board also proposes to require 8 hours of continuing education classes per year. The cost of continuing education classes vary significantly. Some providers offer them for free and some may charge up to $1,000. However, most estimates seem to fall between $100 -$300 per year range. In addition to tuition, the other costs of continuing education would include travel and lodging expenses as well as wages or earnings forgone to attend the classes.

Finally, the Board proposes to switch from a state initial licensure examination to a national examination. According to DPOR, access to the national exam would necessitate a $2,000 per year membership to the Soil Science Society of America. DPOR estimates that the cost of updating current state exam is about the same, thus no additional costs are expected due to this change. However, the current state examination fee is $75 per part or $150 total while the national exam fee is $150 per part or $300 for total. Therefore, applicants for licensure will experience an increase in compliance costs.

Businesses and Entities Affected

The proposed regulations will require soil scientists in Virginia to obtain a license. According to DPOR, currently there are 133 certified soil scientists in Virginia and the membership in Virginia Association of Professional Soil Scientists is estimated to be about 200. However, the number of soil scientists, who are not certified by the Board, or not a member of the association, but who may be currently practicing in Virginia, is not known.

Localities Particularly Affected

The proposed regulation applies throughout the Commonwealth.

Projected Impact on Employment

The proposed regulations have the potential to restrict entry into soil scientist profession in Virginia which would have a negative effect on employment. In addition, the proposed continuing education requirement and switch to a national exam will add to the compliance costs which may discourage some of the soil scientists practicing in Virginia and have a negative effect on employment.

Effects on the Use and Value of Private Property

The proposed regulations do not have a direct effect on the use and value of private property. Indirectly however, higher compliance costs would have a negative effect on the asset value of soil scientist businesses while restricted entry into the profession would have a positive effect. Furthermore, if the proposed changes lead to improvement in service quality, risks to environmental assets may be reduced and have a positive effect on the use and value of private property in the vicinity.

Small Businesses: Costs and Other Effects

Most, if not all, of the soil scientist businesses in Virginia are believed to be small businesses. Thus, all of the costs and other effects discussed above apply to them.

Small Businesses: Alternative Method that Minimizes Adverse Impact

Given the statutory mandate, the Board does not appear to have discretion on switching from certification to licensure. While the Board appears to have discretion on the quantity of the proposed continuing education and on the proposed switch to the national examination, it is not clear that an alternate method such as fewer hours of continuing education would achieve exactly the same goals.

Real Estate Development Costs

No direct effects on real estate development costs are expected. However, if the competency of soil scientists is affected by the proposed licensure rules, there could be some indirect effects on real estate development costs. For example, improved competency may help a soil scientist identify a difficult-to-detect environmental risk associated with a development project. Or, a solution to a known environmental risk associated with a development project may be produced by a more competent professional.

Legal Mandate

The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with Section 2.2-4007.H of the Administrative Process Act and Executive Order Number 14 (10). Section 2.2-4007.H requires that such economic impact analyses include, but need not be limited to, the projected number of businesses or other entities to whom the regulation would apply, the identity of any localities and types of businesses or

other entities particularly affected, the projected number of persons and employment positions to be affected, the projected costs to affected businesses or entities to implement or comply with the regulation, and the impact on the use and value of private property. Further, if the proposed regulation has adverse effect on small businesses, Section 2.2-4007.H requires that such economic impact analyses include (i) an identification and estimate of the number of small businesses subject to the regulation; (ii) the projected reporting, recordkeeping, and other administrative costs required for small businesses to comply with the regulation, including the type of professional skills necessary for preparing required reports and other documents; (iii) a statement of the probable effect of the regulation on affected small businesses; and (iv) a description of any less intrusive or less costly alternative methods of achieving the purpose of the regulation. The analysis presented above represents DPB's best estimate of these economic impacts.