

Department of Legislative Services
 Maryland General Assembly
 2011 Session

FISCAL AND POLICY NOTE

House Bill 659 (Delegates Frush and Barnes)
 Environmental Matters

Agriculture - Pesticides - Regulation of Atrazine

This bill prohibits a person from using, distributing, selling, or offering for sale in the State atrazine, including a pesticide that contains atrazine.

Fiscal Summary

State Effect: Special fund revenues decrease by up to \$8,000 annually due to the loss of registration fees for products containing atrazine. Higher education expenditures increase by up to \$126,600 in FY 2012, largely consisting of one-time equipment costs as well as lesser ongoing fuel and labor costs, for weed management on the University of Maryland Eastern Shore’s (UMES) working farm. Higher education revenues decrease minimally due to an expected reduction in corn yield and sales revenue. Future years reflect ongoing revenue decreases and labor and fuel costs.

(in dollars)	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
SF Revenue	(\$8,000)	(\$8,000)	(\$8,000)	(\$8,000)	(\$8,000)
Higher Ed Rev.	(-)	(-)	(-)	(-)	(-)
Higher Ed Exp.	\$126,600	\$20,800	\$21,500	\$22,200	\$22,900
Net Effect	(\$134,600)	(\$28,800)	(\$29,500)	(\$30,200)	(\$30,900)

Note:() = decrease; GF = general funds; FF = federal funds; SF = special funds; - = indeterminate effect

Local Effect: None.

Small Business Effect: Potential meaningful.

Analysis

Current Law/Background:

Regulation of Pesticides and Pesticide Use

A pesticide distributor generally must register with the State Chemist Section within the Maryland Department of Agriculture (MDA) each brand or product name of a pesticide before distributing it in the State, unless it has been registered by another person and the product label has not been altered or changed. The registration for each pesticide expires December 31 each year. Registered pesticide products undergo a review of the product's label, proposed uses, and potential adverse impacts on agriculture, the environment, the general public, and the regulated industry. State Chemist field inspectors also sample randomly selected products in the market to ensure the products are effective and safe for consumers and the environment. Products that are determined to be ineffective, misbranded, or harmful are removed from the marketplace.

MDA also licenses commercial pest control and not-for-hire firms, issues permits to public agencies for pesticide application, certifies private applicators (farmers or growers who wish to use restricted use pesticides in the production of agricultural commodities), and conducts use observations and inspections of those regulated entities/individuals.

Atrazine

According to the U.S. Environmental Protection Agency (EPA), atrazine is one of the most widely used agricultural pesticides in the United States. It may be applied before and after planting to control broadleaf and grassy weeds and is used primarily on corn, sorghum, and sugarcane. MDA indicates that atrazine is an important tool to farmers using conservation tillage and no-till methods (used to protect soil and prevent erosion), provides economical weed control, and is an essential tool in weed-resistance management programs. Currently 80 pesticide products registered with MDA contain atrazine.

Concerns about the impact of atrazine on human health and the environment led EPA to undertake a comprehensive reevaluation of the potential health and ecological impacts of atrazine in October 2009, which has yet to be completed. EPA indicates that, based on the evaluation, the agency will decide whether to revise its current atrazine risk assessments and whether new restrictions are necessary. Leading up to the reevaluation, EPA had been subject to criticism that it was not taking into account emerging scientific evidence in animal toxicology and human epidemiology studies in determining its levels of concern for atrazine concentrations in drinking water sources.

State Revenues:

Maryland Department of Agriculture

Special fund revenues decrease by up to \$8,000 annually, reflecting the loss of registration fees for the 80 registered pesticide products that contain atrazine. These fee revenues fund the operations of the State Chemist and a portion of the budget of MDA's Pesticide Regulation Section, which regulates pesticide use.

University of Maryland Eastern Shore

Higher education revenues decrease by a relatively minimal amount due to reduced revenue from the sale of corn from UMES' approximately 250-acre working farm. The farm grows various crops and raises livestock and poultry and serves as a research facility for the university's Department of Agriculture. Corn yield is expected to decrease as a result of the loss of the use of products containing atrazine for weed management. The University System of Maryland (USM) indicates that, assuming a 5.7 bushel per acre decrease in corn yield (the average decrease found in a study published in 2008), at current prices revenue from the sale of corn will decrease by approximately \$4,200. Additional farmland may also be purchased by UMES in the near future which may increase the number of acres planted with corn, resulting in a greater loss of revenue.

State Expenditures: Higher education expenditures are expected to increase due to increased herbicide costs for products that do not contain atrazine and/or equipment, fuel, and labor costs to remove weeds on the UMES farm. Depending on how effective other herbicides are at controlling weeds on the farm, expenditures may increase by up to \$126,596 in fiscal 2012 for equipment and fuel and contractual labor costs for weed management. Ongoing fuel and contractual labor costs would be incurred in future years. If additional farmland is purchased, USM indicates an additional full-time position may be needed to handle weed management.

Enforcement of the bill's prohibition by MDA is expected to be handled with existing inspection staff.

Small Business Effect: Small business farmers may be meaningfully impacted by the bill's prohibition. A majority of Maryland's farmers and growers are small businesses, and MDA advises that a ban on atrazine in Maryland would put those farmers and growers at a competitive disadvantage compared to those in neighboring states. MDA estimates that a significant percentage of the acres planted with corn in Maryland were treated with atrazine in 2009 and 2010, based on atrazine sales data.

An EPA analysis, discussed in a 2003 document reviewing the registration of atrazine under federal law, found that corn growers would incur a loss of yield (amount produced per acre) and increased costs for a replacement herbicide in the event of the loss of the use of atrazine.

A more recent study by the Minnesota Department of Agriculture, in partnership with the state's health and pollution control agencies, found the impact a loss of the use of atrazine would have on yield and herbicide costs for Minnesota corn farmers difficult to quantify for a number of reasons. The Minnesota study indicated that various economic and yield studies on atrazine differed in scope, design, and execution, making comparisons difficult and possibly not reflecting real world scenarios for Minnesota farmers. Cost estimates for herbicide alternatives also varied significantly. The study also indicated that the range in the yield impact of use of atrazine or alternatives could vary greatly from year to year on one farm, and from one farm to another.

At the time of the 2007 Census of Agriculture, net cash farm income in Maryland averaged \$32,161 per farm, and in 2009 the average farm size was 160 acres. Based on those figures, assuming an average farm in Maryland generates approximately \$200 of net income per acre, a relatively modest impact on weed management costs and yield per acre could have a meaningful impact for a given farm currently using products that contain atrazine.

MDA also indicates that Maryland farmers, growers, commercial applicators, and pesticide dealers that have existing inventory of products containing atrazine may also incur expenses to dispose of the products through a hazardous waste contractor.

Additional Information

Prior Introductions: None.

Cross File: Although SB 582 (Senator Montgomery, *et al.* - Education, Health, and Environmental Affairs) is designated as a cross file, it is different.

Information Source(s): Maryland Department of Agriculture, Department of Natural Resources, Maryland Department of Transportation, University System of Maryland, U.S. Environmental Protection Agency, Minnesota Department of Agriculture, Department of Legislative Services

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mc/lgc

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