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BILL ANALYSIS

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Senate Bill 840 (as enrolled)
Sponsor: Senator Wayne Kuipers
Senate Committee: Agriculture, Forestry and Tourism
House Committee: Agriculture

PUBLIC ACT 503 of 2006

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RATIONALE

Fertilizer regulations in Michigan last underwent a comprehensive revision in 1975. In the intervening years, there have been significant technological changes in the industry that some believe should be addressed in State law. In addition, some fertilizer materials have been diverted for new and dangerous uses, such as making homemade bombs or manufacturing illegal drugs. Those new threats have prompted calls for increased record-keeping requirements to prevent misuse and allow law enforcement officials to track down those who have purchased fertilizers for illicit purposes.

At the same time, there is an increased awareness of the potential environmental impacts of nutrients from fertilizers that accumulate in the waters of the State. Recently some rivers, lakes, and areas of the Great Lakes have experienced a resurgence of algae blooms, caused by elevated levels of phosphorus in those waters. These concentrated growths of algae can deplete all available oxygen in the water, killing fish and other aquatic life. In some cases, algae blooms can have serious negative health effects for humans and pets. (Please see **BACKGROUND** for more on algae blooms.) Although there are many potential causes of the increased growth of algae, some believe that fertilizers from lawns may be a significant contributor to the problem. Many homeowners evidently are unaware that most of Michigan's soil is rich in phosphorus, and consequently they may be applying phosphorus fertilizer unnecessarily. The excess phosphorus from fertilizer can be washed by rainwater into

rivers and streams, providing nutrients for the growth of algae. According to the Huron River Watershed Council, one pound of phosphorus can generate up to 500 pounds of algae.

In an effort to control this problem, about 15 municipalities reportedly have enacted ordinances regulating fertilizer use within their jurisdictions. These efforts can have only a limited effect, however, since all of the waters of the State are connected, and one municipality cannot control what other communities are doing upstream. To address these and other concerns, it was suggested that Michigan's fertilizer regulations should be revised to reflect current business practices, to improve tracking of fertilizer materials, and to increase public awareness of proper fertilizer storage and use through educational programs.

CONTENT

The bill amends Part 85 (Fertilizers) of the Natural Resources and Environmental Protection Act to do the following:

- **Revise fertilizer labeling and invoice requirements, and provide exemptions from those requirements when no primary nutrients are claimed.**
- **Remove a prohibition on the sale of fertilizer containing less than a total of 20% of certain primary nutrients.**
- **Revise registration requirements for specialty fertilizers and soil**

conditioners, and provide that a distributor does not have to register a brand of fertilizer that is registered by another person, if the label does not differ in any respect.

- **Require manufacturers and distributors of custom blend soil conditioners or fertilizers to license their firm for an annual fee of \$100, or (as currently required) register each grade distributed for a fee of \$25.**
- **Raise the minimum penalty for nonpayment of inspection fees from \$10 to \$50.**
- **Establish a three-year record-keeping requirement for registrants.**
- **Waive the payment of fertilizer inspection fees of less than \$5.**
- **Prohibit a person from distributing an adulterated product.**
- **Adopt sampling and analysis methods established by the Association of American Plant Food Control Officials or the Association of Analytical Communities, International, and allow the adoption of other methods as appropriate.**
- **Establish penalties for violations of Part 85.**
- **Provide exemptions from penalties and sanctions for commercial carriers and public officials under certain conditions.**
- **Establish a "Fertilizer Control Fund", which will receive all fees, administrative and civil fines, and payments for costs of investigations.**
- **Provide for the Fund to be used for administering and enforcing Part 85, as well as the development of training programs.**

The bill takes effect on March 30, 2007.

Labeling; Definitions

Part 85 requires packaged fertilizer distributed in the State, including custom mixed fertilizer and soil conditioner, to have an affixed label. The bill refers to mixed fertilizer, instead of custom mixed fertilizer. ("Mixed fertilizer", under Part 85, is a fertilizer containing any combination or mixture of fertilizer materials designed for use or claimed to have value in promoting plant growth, including mixtures of fertilizer and pesticide. Under the bill, the term means a fertilizer containing any

combination or mixture of fertilizer materials.)

Currently, "package" or "packaged" means any type of product regulated by Part 85 that is distributed in individual containers with a capacity not exceeding 55 gallons for liquids and 200 pounds for solids. The bill removes the weight and volume restrictions.

Part 85 requires the affixed label to include the net weight of the contents, except that peat or peat moss must be designated by volume. Under the bill, soil conditioners, peat, or peat moss may, but do not have to be, designated by volume.

Under the part, the label also must include the fertilizer grade unless the material is peat, peat moss, or material sold as a soil conditioner. The bill states that the grade is not required on the label when no primary nutrients are claimed. Under the bill, "primary nutrients" means total nitrogen, available phosphate, or soluble potash, or any combination of those nutrients.

Under Part 85, "labeling" means all labels and other written, printed, or graphic matter upon or accompanying fertilizer at any time, including advertising or sales literature. The bill also includes in the definition electronic material, brochures, posters, and internet, television, and radio announcements used in promoting the sale of the fertilizer.

Part 85 defines "fertilizer material" as any substance containing any recognized plant nutrient, which is used as a fertilizer or for compounding mixed fertilizers. Under the bill, "fertilizer material" instead means a fertilizer that meets any of the following:

- Contains not more than one of the following as primary nutrients: total nitrogen, available phosphate, or soluble potash.
- Has 85% or more of its plant nutrient content present in the form of a single chemical compound.
- Is derived from a plant or animal residue or by-product or natural material deposit that has been processed in such a way that its content of plant nutrients has not been materially changed except by purification and concentration.

Information on Invoice

Part 85 requires a fertilizer distributed in this State in bulk to be accompanied by an invoice or statement to be furnished to the purchaser at the time of delivery, containing the following information:

- Name and address of the licensed manufacturer or distributor.
- Name and address of the purchaser.
- Date of sale.
- Brand or product name.
- Grade.
- Guaranteed analysis.
- Net weight.

Under the bill, the grade is not required when no primary nutrients are claimed. In addition, the invoice or statement accompanying a custom blend must contain the following:

- Name and address of the licensed manufacturer or distributor.
- Name and address of purchaser.
- Date of sale.
- The net weight and guaranteed analysis of the custom blend and/or the guaranteed analysis and net weight of each material used in its formulation.

Under the bill, "custom blend" means a fertilizer blended according to specifications provided to a blender in a soil test or blended as specifically requested by the consumer prior to blending.

Guaranteed Analysis

Under Part 85, the guaranteed analysis for nitrogen, available phosphoric acid, and soluble potash must be expressed as whole number percentages on the label, and listed in that order. The bill instead requires the guaranteed analysis to show the minimum percentage of plant nutrients claimed for nitrogen, available phosphate, and soluble potash, in that order.

Part 85 prohibits the sale of a mixed fertilizer if the sum of the guarantees for nitrogen, available phosphoric acid, and soluble potash totals less than 20%, except for specialty fertilizers registered with the Michigan Department of Agriculture (MDA). If elemental guarantees are required by rules promulgated under Part 85, the guaranteed analysis has to be expressed as

percentages of available phosphorus and soluble potassium. The bill removes those provisions.

The bill requires that the grade for mixed fertilizers be given in whole numbers only. Specialty fertilizers with a guarantee of less than 1% of total nitrogen, available phosphate, and soluble potash, however, may use fractional units. Fertilizer materials, bone meal, manures, and similar materials also may be guaranteed in fractional units. Grades for custom blends may be given either in whole numbers or expressed to the nearest one-tenth of a percent in decimal form. For unacidulated mineral phosphatic material and basic slag, bone, tankage, and other organic phosphatic materials, the total phosphate or degree of fineness, or both, also may be guaranteed.

Under Part 85, additional plant nutrients claimed to be present must be guaranteed on the elemental basis, at certain minimum levels. The bill deletes a requirement that the material be approved by the MDA Director, with the advice of the director of the Michigan Agricultural Experiment Station. Instead, other beneficial compounds or substances, determinable by laboratory methods, may be guaranteed if approved by the MDA Director.

Specialty Fertilizers & Soil Conditioners

Under Part 85, a person is prohibited from distributing a specialty fertilizer or soil conditioner until it is registered by the manufacturer or distributor with the MDA. The bill removes the reference to the manufacturer or distributor.

The bill retains a requirement that a person applying for registration pay a \$25 fee for each brand and product name of each grade, as well as appropriate groundwater and freshwater protection fees. The bill deletes a requirement that an application for registration be submitted in duplicate.

Under the bill, a manufacturer or distributor of custom blend specialty fertilizers for home lawns, golf courses, recreational areas, or other nonfarm areas, is not required to register each grade distributed, but must license the firm on an application furnished by the Director for an annual fee of \$100. A manufacturer or distributor of custom-blended soil conditioners must either

register each brand or blend distributed, or license its firm for an annual fee of \$100. The fertilizer or soil conditioner distributed under these provisions must be labeled as required under Part 85, and the manufacturer or distributor must maintain each label for one year, for inspection by the Director.

The bill states that a distributor is not required to register a brand of fertilizer that is registered by another person, if the label does not differ in any respect. (The bill defines "distributor" as any person who distributes fertilizer for sale or use in this State.)

"Soil conditioner", under Part 85, means a substance that is used or intended for use solely for the improvement of the physical nature of soil and for which no claims are made for plant nutrient content. The term does not include guaranteed plant nutrients, hormones, bacterial inoculants, or products used in directly influencing or controlling plant growth. The bill includes in the definition materials such as peat moss and peat products, composted products, synthetic soil conditioners, or other products that are worked into the soil or applied on the surface to improve the properties of the soil for enhancing plant growth. The bill excludes guaranteed plant nutrients, agricultural liming materials, pesticides, unmanipulated animal or vegetable manures, hormones, bacterial inoculants, and products used in directly influencing or controlling plant growth. The bill provides that a soil conditioner that is claimed to have nutrient value is considered a fertilizer.

Inspection Fees

Under Part 85, an inspection fee of 10 cents per ton must be paid to the MDA for all fertilizers or soil conditioners distributed in the State. The inspection fee for peat or peat moss is two cents per cubic yard. Payments due or refunds for overpayments of less than \$1 are waived. Under the bill, payments due of less than \$5 are waived, and refunds of less than \$5 will not be processed unless requested in writing.

Part 85 provides for a penalty of 10% of the amount due, with a minimum of \$10, for amounts not paid when due. The bill, instead, requires a penalty of 10% or \$50, whichever is greater, for any report not filed

with the MDA by the due date. (Part 85 requires that a report, with remittance to cover the inspection fees, be filed with the MDA within 30 days of the close of each period of the year, as specified by the Director.)

Records

Part 85 requires each licensee to maintain for three years a record of quantities and grades of fertilizer and soil conditioner sold or distributed by the licensee and to make the records available for inspection and audit on request by the MDA. The bill extends those requirements to registrants. In addition, the bill requires that records be made available for inspection or audit during normal business hours.

Part 85 requires each vendor of fertilizer and soil conditioner to maintain shipping data pertaining to fertilizer and soil conditioner for three years. The bill instead requires each distributor to maintain those data.

Inspection & Analysis

Under Part 85, the MDA must inspect, sample, and analyze fertilizers and soil conditioners distributed within the State as necessary to determine compliance with the part. The bill requires the use of sampling and analysis methods established by the Association of American Plant Food Control Officials or the Association of Analytical Communities, International, as those standards exist on the bill's effective date. The bill incorporates those standards by reference, and allows the MDA to promulgate rules to update them. The MDA Director also may adopt, by rule, other methods considered appropriate in cases not covered by the specified methods or when demonstrably improved methods are available.

Under Part 85, MDA representatives and inspectors have free access during regular business hours to all premises where fertilizers or soil conditioners are manufactured, sold, or stored, and to all vehicles and vessels used in transporting a fertilizer or soil conditioner in the State. The bill also provides for free access during extended business hours.

Adulterated Product

The bill prohibits a person from distributing an adulterated product. (Part 85 defines "adulterated product" as a product that contains any deleterious or harmful substance in sufficient amount to render it injurious to beneficial plant life, animals, humans, aquatic life, soil, or water when applied in accordance with the directions on the label, or if adequate warning statements or directions for use that may be necessary to protect plant life, animals, humans, aquatic life, soil, or water are not shown on the label.)

Remedies & Penalties

Under the bill, a person who violates Part 85 is liable for all damages sustained by a purchaser of a product sold in violation of the part. In an enforcement action, a court may order restitution to a party injured by the purchase of a product sold in violation of the part, in addition to other sanctions provided by law.

The bill prohibits a court from allowing the recovery of damages by a person against whom an administrative action was brought if the action resulted in an order stopping the sale or use of fertilizer or fertilizer material or requiring its seizure, if the court finds that there was probable cause for the action or order.

Under the bill, if the MDA Director finds, after an opportunity for an administrative hearing, that a person has violated or attempted to violate any provision of Part 85 or a rule promulgated under it, the Director may impose an administrative fine of up to \$1,000 for each violation. If the Director finds that a violation has occurred despite the exercise of due care or did not result in significant harm to human health or the environment, he or she may issue a warning instead of imposing a fine. If a person fails to pay an administrative fine, the Director must notify the Attorney General, who must bring an action in court to recover the fine.

The bill also authorizes the MDA Director to bring an action to enjoin the violation or threatened violation of Part 85 or a rule, in a court of the county where the violation occurs or is about to occur.

The bill authorizes Attorney General to file a civil action in which the court may impose a civil fine of up to \$5,000 for each violation or attempted violation of Part 85 or a rule promulgated under it. In addition, the Attorney General may bring an action in circuit court to recover the costs of the investigation from the person who violated or attempted to violate Part 85. Money recovered under these provisions must be deposited into the Fertilizer Control Fund.

Under the bill, a person who violates or attempts to violate Part 85 or a rule promulgated under it is guilty of a misdemeanor punishable by imprisonment for up to 90 days or a maximum fine of \$5,000 for each offense, in addition to any administrative fines imposed. A person who knowingly and with malicious intent violates the part or a rule is guilty of a misdemeanor punishable by up to 90 days' imprisonment or a maximum fine of \$25,000 for each offense.

A person who violates Part 85 or a rule promulgated under it is subject to the specified penalties and remedies regardless of whether he or she acts directly or through an employee or agent.

The bill provides that, in addition to any other lawful defense of an action under these provisions, a person may present evidence as an affirmative defense that, at the time of the alleged violation, he or she was in compliance with Part 85 and rules promulgated under it.

The bill states that applicable provisions of the Revised Judicature Act apply to civil actions filed under Part 85.

Exceptions to Penalties

Under the bill, the penalties and sanctions provided for violations of Part 85 do not apply to any of the following:

- A commercial carrier lawfully transporting a commercial fertilizer in the State, if the carrier, upon request, permits the MDA Director to copy all records showing the transactions in and movement of the commercial fertilizer.
- The shipment or movement of any commercial fertilizer considered to be in violation of Part 85, for the specific purpose of disposal or storage when

conducted under the approval of the Director.

- Public officials of the State and the Federal government while engaged in the performance of their official duties in administering Part 85 or rules promulgated under it.

Grievances

Under the bill, a person aggrieved by an order issued pursuant to Part 85 may request a hearing under the Administrative Procedures Act (which provides for contested case hearings).

Fertilizer Control Fund

The bill creates the Fertilizer Control Fund within the State Treasury. The State Treasurer must deposit into the Fund all fees, administrative or civil fines, and payments for the costs of investigations conducted under Part 85. The Treasurer also may receive money or other assets from any source for deposit into the Fund. All interest and earnings from Fund investments must be credited to the Fund, and money in the Fund at the close of the fiscal year must remain in the Fund and not lapse into the General Fund.

The Fund may be used only for the administration and enforcement of Part 85, and for the development of training programs to ensure the proper use and storage of fertilizer.

MCL 324.8501 et al.

BACKGROUND

In recent years, algae blooms have re-emerged as a problem in the Great Lakes and in other Michigan waters. These highly concentrated growths of algae can consume all available oxygen in the water and render parts of lakes or rivers uninhabitable for fish and other aquatic life. Algae blooms are considered a nuisance, littering beaches, clinging to rocks, or forming a thick mat on the surface of the water. The decaying algae produces a disagreeable odor, and can have a slimy feel. Some types of algae blooms can have serious health effects for people and pets if they contain toxic microcystins, which can cause skin rashes, nasal irritation, vomiting, or diarrhea. In Brazil in 1996, up to 75 people were

reported to have died from exposure to microcystins, although no such deaths have occurred in the United States, according to an article in the *Toledo Blade* (7-9-05).

During the 1960s and 1970s, concern over algae blooms and their effects on aquatic life led to extensive efforts to reduce pollution in the Great Lakes. In 1972, the United States and Canada signed the Great Lakes Water Quality Agreement (GLWQA), which established, among other things, limits on phosphate levels in each of the Great Lakes. The cleanup efforts were successful, and by the 1980s the lakes were considered to be much healthier, with the problem of algae blooms largely eliminated.

Recent tests have shown that although deep-water phosphate levels in the Great Lakes have not risen above the limits established in the GLWQA, local levels along some parts of the shoreline and in some interior lakes have increased significantly. Many possible causes could explain the rise in phosphate levels, including waste water treatment plants, and fertilizer runoff from agricultural and urban areas. In addition, invasive species such as zebra mussels could be exacerbating the problem. The mussels, which have been a growing problem in the Great Lakes for a number of reasons, tend to concentrate phosphates in the areas where they are located. Zebra mussels also filter particulates from the water, allowing more sunlight to penetrate to greater depths. Algae, which need sunlight to grow, then are able to thrive in deeper water or in areas where the water previously was too cloudy. Although scientists are still unsure of the extent to which these and other factors may be contributing to the current algae problem, residential runoff from fertilizers is considered to be a likely contributor.

ARGUMENTS

(Please note: The arguments contained in this analysis originate from sources outside the Senate Fiscal Agency. The Senate Fiscal Agency neither supports nor opposes legislation.)

Supporting Argument

Fertilizers commonly contain three essential plant nutrients: nitrogen, potassium, and phosphorus. Individual plant species use these nutrients in differing amounts, and each requires a proper balance of nutrients for optimum growth. An excessive amount

of one nutrient over the others may inhibit growth or actually harm the plants. Homeowners, however, rarely do soil testing before applying fertilizer to their lawns, and many evidently are unaware of the potential harm that excessive phosphorus or other nutrients can cause. Even in communities that are well away from rivers or lakes, overapplication or misapplication of fertilizer can produce runoff that can flow into storm drains, rivers, or streams, contaminating the waters of the State. Fertilizer runoff can elevate the levels of nutrients such as phosphorus in the water, creating conditions for algae to multiply rapidly, causing algae blooms and other problems.

In many cases, the application of phosphorus fertilizer may be unnecessary. Much of Michigan's soil is rich in phosphorus, and lawns or other residential areas often have no need for added phosphorus for healthy growth, according to the Michigan Environmental Council. A study by the Council in the Kalamazoo area indicated that 99% of soil samples taken from residential yards in that region had sufficient phosphorus. Despite the soil conditions in the State, most of the commercially available fertilizers contain phosphorus, and many residents apply those fertilizers to their lawns. Fertilizer that spills onto sidewalks and driveways poses an additional risk, since it cannot be absorbed by those impervious surfaces, and is easily washed into local waters.

The bill will help to address these problems by creating a dedicated Fertilizer Control Fund that is to be used to develop training programs on the proper use and storage of fertilizer, as well as for the administration and enforcement of the fertilizer regulations. These educational provisions may reduce the amount of fertilizer that is misapplied or improperly stored in the State, as people begin to understand the potential environmental damage that can come from excessive fertilizer use. In addition, the regulations will ensure that all fertilizer sold or distributed in the State is clearly labeled with the nutrients present, allowing consumers to make educated decisions on the best fertilizer to meet their needs.

Response: Although the overuse of phosphorus is a continuing concern, hardware and home improvement stores reportedly have been reluctant to carry fertilizer with no phosphorus, because of

lack of demand or possibly out of concern that consumers would consider it deficient. Many home improvement stores in the Lansing area, for example, do not carry phosphorus-free fertilizer. To decrease the amount of phosphorus in the State's waters effectively, the law should ensure that low-phosphorus and phosphorus-free fertilizers are widely available.

Supporting Argument

Some components of fertilizers can be used to harm people or property or to manufacture illegal drugs. Ammonium nitrate, for example, is a common and relatively inexpensive source of nitrogen in fertilizers, but it also can be used as an explosive in improvised bombs. Anhydrous ammonia, another common component in fertilizers, recently has been used as an ingredient in the production of methamphetamine. The current fertilizer regulations were written in 1975, before these potential abuses became evident. The bill will address those problems in fundamental ways, by improving record-keeping requirements and making it easier to track down individuals who may have purchased fertilizers for illegal uses.

The bill updates the labeling and sampling requirements to reflect the most recent industry standards. Since the current regulations are over 30 years old, they do not reflect the technological changes and the new materials and methods used in today's fertilizer industry. The bill provides a much needed update, and permits the MDA Director to adopt new sampling standards by administrative rule, eliminating the need for repeated revisions to the statute as the industry develops new standards.

Response: Although the bill updates many requirements under Part 85, it fails to increase the sampling fee of 10 cents per ton, which has not been changed since 1975. During that time, the cost of conducting sampling activities has risen substantially. The fee should be raised to 15 cents to help cover the cost of conducting sampling activities, and to assist the MDA in performing some of the enforcement responsibilities required under Part 85. According to the MDA, a five-cent increase in the sampling fee would generate additional annual revenue of approximately \$70,000, or the approximate cost of one full-time employee.

FISCAL IMPACT

The bill will have a minimal fiscal impact on the Department of Agriculture as its provisions mostly further delineate existing responsibilities. The annual license fee for custom blenders of fertilizer will affect only approximately 10 businesses and generate approximately \$1,000 in new revenue, according to the MDA. The administrative and civil fines for violations will generate an indeterminate amount of revenue for the Fertilizer Control Fund, which will be used for the administration and enforcement of Part 85, as well as the development of training programs on the proper use and storage of fertilizer.

The bill's criminal penalties will have an indeterminate fiscal impact on local government. There are no data to indicate how many offenders will be convicted of violating Part 85. Local units will incur the costs of misdemeanor probation and incarceration in local facilities, which vary by county. Additional penal fine revenue will benefit public libraries.

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This analysis was prepared by nonpartisan Senate staff for use by the Senate in its deliberations and does not constitute an official statement of legislative intent.