

IOWA'S 1987 GROUNDWATER PROTECTION ACT

Iowa's Groundwater Protection Act went into effect on July 1, 1987. The law is the result of public concern about contamination of Iowa's groundwater resources. Data from all over the state have shown that agricultural chemicals are finding their way into groundwater.

The law calls for spending \$64.5 million over 5 years on programs to prevent groundwater contamination from agricultural chemicals, sinkholes, agricultural drainage wells, municipal and industrial wastes, landfills, household chemicals, and buried chemical and petroleum storage tanks. Three fourths of the \$64.5 million will come from new or increased taxes or fees.

Environmentalists, who supported passage of the law, say it is a model other states can follow. Industry representatives feel the law is too extreme and misses the objective of protecting Iowa's groundwater. One thing is obvious, regardless of your feeling about the law, it will have an immediate impact on everyone who manufactures, sells, or applies agricultural chemicals in Iowa.

The law lists two findings; 1."Any detectable quantity of a synthetic organic compound in groundwater is unnatural and undesirable." and 2. "Decontamination (of groundwater) is difficult and expensive to accomplish. Therefore, preventing contamination of groundwater is of paramount importance". Based on these findings, the goal of the law is to prevent contamination and to restore contaminated groundwater to a potable state.

The law defers a decision on the implementation of groundwater pollution standards. The Iowa Department of Natural Resources has been directed to study the question of standards and report to the legislature by 1989. The question of standards sparked a spirited and sometimes contentious debate. Environmentalists objected to setting standards saying that standards license acceptable levels of pollution. Industry representatives argued that you need target levels to determine the progress of cleanup efforts, and that "zero" tolerance for contaminants is not realistic.

The law addresses several sources of contamination; pesticides and fertilizers, wells and sinkholes, landfills, household hazardous wastes, and underground storage tanks. This discussion will be confined to provisions in the law dealing with pesticides and fertilizers.

Prepared for the 1987 North Central Extension Industry Soil Fertility Workshop, Oct. 28-29, Bridgeton, Missouri by Randy Killorn, Extension Agronomist, Agronomy Hall, Iowa State University, Ames, IA 50011.

GENERAL PROVISIONS OF THE GROUNDWATER PROTECTION ACT

1. It significantly increases the amount of information collected by the state on the quality of groundwater.
2. It establishes the Leopold Center for Sustainable Agriculture at Iowa State University. The center will make competitive grants to researchers at all Iowa colleges and universities to develop and evaluate practices that will improve farm profit by helping to reduce input costs while reducing groundwater pollution and soil erosion.
3. It established an Environmental Health Center at the University of Iowa to assess pollution's impact on human health.
4. It provides for groundwater hazard mapping and development of a comprehensive water resource data system.
5. It provides funding to continue the Big Spring Project in northeast Iowa.
6. It provides funding for demonstration and educational initiatives related to decreasing the potential for groundwater contamination and energy conservation.

SPECIFIC PROVISIONS RELATED TO PESTICIDES AND FERTILIZERS

1. Anyone engaged in the sale of fertilizers must obtain an annual license at a cost of \$10 from the Department of Agriculture and Land Stewardship.
2. Anyone selling specialty fertilizers in quantities of 25 pounds or less or applying specialty fertilizers for compensation must pay an annual \$50 inspection fee.
3. Anyone manufacturing specialty fertilizers in quantities of 25 pounds or less must pay a registration and an inspection fee of \$100 annually.
4. Anyone selling nitrogen-based fertilizers must pay an additional \$.75 per ton sold based on an 82% solution and prorated for different nitrogen contents.
5. Commercial or public applicators applying any pesticide must be certified. The "under the supervision of a certified applicator" rule is gone. Certified pesticide applicators must now pass a state exam.
6. Any person applying a restricted-use pesticide must be certified.
7. Recertification will be by re-examination for commercial as well as private applicators.

8. Anyone engaged in the sale of pesticides must obtain a \$25 annual license from the Department of Agriculture with the exception of dealers whose gross annual sales are less than \$10,000 for each business location owned or operated by the dealer. After July 1, 1988, the license will cost one-tenth of one percent of gross sales.

9. In order to register a pesticide for use in Iowa, the manufacturer must pay a registration fee for each chemical in the amount of one-fifth of one percent of gross sales up to a maximum of \$3000.

10. Dealers must annually report not only fertilizers distributed in the state, but now also pesticides sold, distributed or applied in the state.

11. The Secretary of Agriculture is directed to determine the proper notice to be given by commercial or public applicators to occupants of adjoining urban properties prior to or after exterior pesticide applications.

12. The Department of Agriculture and Land Stewardship is directed to develop a program for handling used pesticide containers. This could include a recycling system complete with deposits and refunds modeled after the one currently used for aluminum cans.

The law also allocates \$1.5 million per year to support the Agricultural Energy Management Fund which will sponsor field demonstrations and applied studies to develop best management practices and appropriate technology to enhance agricultural chemical efficiency by reducing waste. The program began this year. Presently, the money is nearly evenly divided between Ag Experiment Station projects and Cooperative Extension projects. The projects address such topics as nitrogen and pesticide management in different tillage systems and different crop rotations. Every county in Iowa will have at least one demonstration prior to termination of the five year project.

One section of the law will affect anyone offering soil testing services in the state. It states, "The Iowa Cooperative Extension Service in Agriculture and Home Economics shall develop and publish material on the interpretation of the results of soil tests. The material shall also feature the danger to groundwater quality from the overuse of fertilizers and pesticides. The material shall be available from the service at cost and any person providing soil tests for agricultural or horticultural purposes shall provide the material to the customer with the soil test results." This is in direct response to public concern about the considerably different recommendations made by different soil testing laboratories. At the least, this provision will increase mailing costs for soil testing laboratories.

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