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What is the BMP Selection Process for Groundwater Protection from Pesticides?

AE-1110, July 1996

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The First Step

The preparation of NDSU Extension Service Publication ER-25, "Best Management Practices for Groundwater Protection from Agricultural Pesticides: Technical Paper," was the first step of the BMP selection process. Study results were reviewed to generally characterize groundwater problems and sensitivity in North Dakota. Management practices were reviewed to assess their general application to North Dakota conditions.

The Second Step

The second step of the process uses expertise from various sources to help producers within a specific region of the state select BMPs. Regional committees of producers organized according to natural boundaries and common resources are proposed. Producers with similar soils, landscapes, and climate are most likely to have similar management systems and problems. An advisory group of scientists and engineers will assist each regional BMP committee with the selection process.

Producer involvement is recognized as the most important component of BMP selection.

Participants in this process must understand, however, that local selection of BMPs is an experimental program. By state and federal law, authority for BMP selection and implementation to protect water quality rests with several regulatory agencies. If voluntary selection and implementation of BMPs fail to protect groundwater quality, these agencies reserve the right to select and implement management practices as they find necessary.

The demonstration of need for groundwater protection is a critical part of generating local support for a BMP program. Pesticide detections in local groundwater supplies will be identified and located. Groundwater impacts from both present and past pesticide use patterns in the region must be considered.

NDSU Extension Bulletin No. 63, "An Assessment System for Potential Groundwater Contamination from Agricultural Pesticide Use in North Dakota," will be used to categorize areas of groundwater sensitivity. Results of the assessment will be used to help committee members select BMPs that are both effective and acceptable in their region. The BMP committees will also make recommendations that relate to implementation of regional educational plans.

The Third Step

The third step of the BMP selection process occurs on the farm. It is the connection between planning and actual land management practices. At the farm level, the BMP selection process will adjust regional BMPs to fit individual farming operations.

The BMP selection process on the farm will depend on communication between the producer and individuals trained in the technical aspects of BMP development, function, and application. The BMP training program will include those individuals generally used by local producers as sources of information.

Further Information

This circular is one of seven GROUNDWATER/PESTICIDE FACT SHEETS. Please refer to the following fact sheets for additional

information.

- AE-1110 What is the BMP Selection Process for Groundwater Protection from Pesticides?
- AE-1111 How is the Assessment Process for Ground-water Contamination from Pesticides Used for BMP Selection?
- AE-1112 Farmstead BMP Recommendations for Groundwater Protection from Pesticides
- AE-1113 Improved Pesticide Application BMPs for Groundwater Protection from Pesticides
- AE-1114 Integrated Pest Management (IPM) BMPs for Groundwater Protection from Pesticides
- AE-1115 Soil and Water Conservation BMPs for Groundwater Protection from Pesticides
- AE-1116 Irrigation BMPs for Groundwater Protection from Pesticides

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