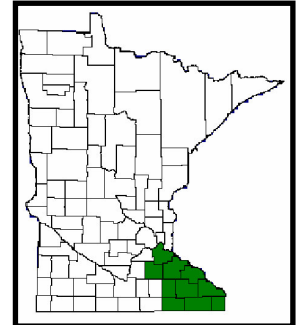


Promoting Pesticide Best Management Practices in Southeastern Minnesota *(a supplement to the full list of MDA pesticide BMPs)*

The Minnesota Department of Agriculture (MDA) has developed Best Management Practices (BMPs) for pesticides to protect water resources including both surface water and groundwater. Due to the unique characteristics of southeast Minnesota (see graphic), certain BMPs and label requirements are particularly important for use in this part of Minnesota. Further, in working with applicators in SE Minnesota, the MDA has noted a number of recurring questions. This fact sheet is intended to emphasize pesticide BMPs that are particularly important in SE Minnesota. It should be used as a supplement to the full list of MDA pesticide BMPs available on the web at: <http://www.mda.state.mn.us/appd/bmps/bmps.htm>



- 1. Atrazine, and premixes or tank mixes containing atrazine, may not be applied within 50 feet of sinkholes or wells. This is label requirement and not optional.** Application setbacks for lakes, streams and on terraces are also required. See label for details.
- 2. For all pesticides, evaluate surface drainage patterns in your field. Use application buffers or vegetative buffers and filter strips on fields with runoff potential.** Buffers are especially important in SE Minnesota where surface and groundwater is vulnerable to pesticide losses particularly around sink holes, tile inlets and terraces.
- 3. Limit total atrazine use per year to 0.8 lb of active ingredient per acre on coarse-textured soils. On medium and fine-textured soils, a total of 1.0 lb of active ingredient per year can be used for pre-emergence weed control in southeastern Minnesota.** Make sure that applications of pure or premix herbicides used in SE Minnesota are within the recommended rates of atrazine use per year.
- 4. Determine your soil's texture and organic matter content to utilize proper application rates of chloroacetamide herbicides such as acetochlor, and then limit chloroacetamide herbicide application rates to the indicated label recommendation.** These soil parameters should be accounted for in determining the most appropriate pesticide application rate. There are additional label requirements for certain products.
- 5. Determine the depth to groundwater in your fields and consider protective practices in vulnerable areas. Some manufacturers recommend against application where groundwater is vulnerable, and some products are prohibited from use where groundwater is shallow.** Knowledge of groundwater depth is often limited to data gathered from septic and well installers, though this is not the equivalent of actual depth to the water table. Consult your local NRCS or SWCD office for assistance with water table depth. Label requirements that prohibit application to fields with specific depths to groundwater must be followed.
- 6. Don't use the same herbicide or herbicides with the same mode of action in back-to-back years.** In southeastern Minnesota, this is often an issue in corn-corn cropping sequences that occur as part of an alfalfa rotation.
- 7. Precision applications of herbicides, including spot applications, are preferred.** While most spot spraying appears to be limited to post-emergence applications of glyphosate in pre/post weed emergence packages, spot spraying of other herbicides – based on scouting – is also encouraged. Eliminating surviving weeds such as giant ragweed through spot treatments will delay the possible development of resistant biotypes to currently used herbicides.

The MDA's core herbicide BMPs and herbicide-specific BMPs are provided as a series of options. The complete set of BMPs is available at <http://www.mda.state.mn.us/appd/bmps/bmps.htm> Always read pesticide product labels. Label use requirements and application setbacks are legally enforceable.