FORESTRY FACTS

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Wisconsin's Forestry Best Management Practices for Water Quality Using Forestry Chemicals

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Common chemicals used in forest management are generally pesticides (insecticides, herbicides and fungicides) and fertilizer. These chemicals are used to control insects, unwanted vegetation and disease, and to increase tree growth.

When used properly, chemicals should not affect water quality. However, when improperly applied, chemicals can contaminate surface water or groundwater when they drift, flow overland as runoff, or leach through the soil into groundwater. Most water quality problems associated with pesticides and fertilizers are caused when they are spilled or improperly sprayed directly on surface water.

Some chemicals are labeled for use in or near streams, lakes or wetlands. Still, use extra care when using chemicals in riparian management zones and wetlands.

Integrated Pest Management

Integrated Pest Management (IPM) uses a combination of manual, mechanical, biological, chemical and preventative techniques to minimize the impact of insects, diseases and unwanted vegetation. IPM may reduce dependence on the use of chemicals. Contact the Wisconsin DNR for information on IPM.

BMPs

The BMPs on the next page describe techniques to avoid contaminating surface water and groundwater. These BMPs complement local, state and federal regulations governing the storage, sale, transportation, handling and application of chemicals.

General BMPs for Chemical Use

▲ Maintain a spill containment and cleanup kit appropriate for the materials on the operation and report all spills. For more information, see Forestry Fact No. 4, *Fuels, Lubricants, Waste and Spills.*

▲ Follow all EPA label instructions on chemical containers.

▲ Apply chemicals only under favorable weather conditions.

▲ Calibrate spray equipment to apply chemicals uniformly and in the correct quantities.

▲Prevent chemical leaks from equipment. Check all equipment for leaking hoses, connections and nozzles.

▲ Use chemicals in riparian management zones with guidance from a trained natural resource professional.

▲ When applying chemicals not labeled for aquatic use in riparian management zones, use spot-injection or stump treatment methods.

▲ Avoid applying herbicides in areas where the chemicals can kill stabilizing vegetation on slopes, gullies and other fragile areas subject to erosion that drain into surface water.

▲ Mix and load chemicals out of riparian management zones and, where practical, in upland areas.

▲ Rinse spray equipment and discharge rinse water only in areas that are part of the application site.

▲ Dispose of chemical containers according to label instructions.

BMPs for Aerial Application

▲ Hire a licensed aerial applicator.

▲ Identify and avoid riparian management zones and surface water to prevent chemicals not labeled for aquatic use from drifting over open water, or from accidentally being applied directly on the water.

By Federal Law:

Chemical users must follow Environmental Protection Agency (EPA) labels on pesticide containers.

Read the Label First!!

Forestry Facts on BMPs are for information only. For details on specific BMPs and their implementation, see the BMP field manual, *Wisconsin's Forestry Best Management Practices for Water Quality*, DNR Pub. FR-093 95. For a copy, ask your DNR forester or call (608) 267-7494.