

PESTICIDE INFORMATION SHEET

PESTICIDE BEST MANAGEMENT PRACTICES (BMP's)

The protection of the nation's surface water and groundwater resources has become one of the primary environmental issues facing pesticide applicators. This is especially true in Connecticut with recent stormwater discharge regulations imposed on the City of Stamford by the State of Connecticut Department of Energy and Environmental Protection (DEEP).

Pesticides can easily reach surface waters by running off the application site following a heavy rainfall. Pesticides can also leach through the soil into the groundwater drinking supply. Contamination resulting from either of these sources is classified as "non-point source" contamination. Water contamination can also be the result of a direct or specific source, such as spill or back-siphoning during filling of pesticide application equipment. This type of contamination is referred to as "point source" contamination.

It is the responsibility of all pesticide applicators to ensure that they are using every means available to prevent pesticides from contaminating Connecticut's surface and groundwater resources. Pesticide applicators can greatly reduce the risk of either point or non-point source contamination from pesticides by utilizing Best Management Practices (BMP's). BMP's are effective, common sense practices that emphasize proper mixing, loading and application of pesticides and also include methods that should be used before, during and after application.

When these recommended Best Management Practices are followed the potential to harm the environment will greatly be reduced.

Identify the Vulnerability of the Area



- 13 **Know The Application Site** – Scout the area to evaluate the extent of the pest problem in order to select the appropriate control method. Identify environmentally sensitive areas and learn how the soil types and the layout of each application site affect the movement of water, both through and across soil.
- 13 **Read And Follow Label Directions** – Pesticide labels contain important information about applicator and environmental safety, including water quality protection. Always follow label directions.
- 13 **Match Application Rate To The Pest Problem** – Every pesticide label specifies application rates. Carefully consider all aspects of the pest problem such as the pest or pests, level of infestation, location, and environmental consideration (i.e., soil type, organic matter).
- 13 **Do Not Mix and Load Near Water** – Pesticides can reach groundwater and surface water as a result of discharges or spills that occur during mixing and loading operations. Mixing and loading should be done as far as possible (at least 50 feet) from wells, lakes, streams, rivers and storm drains. When possible, mix and load the pesticides at the site of application. Applicators should also consider the use of liquid-tight mixing and loading pad. Be sure all containers being transported are secured.
- 13 **Prevent Backsiphoning** – When filling any pesticide spray tank from a well or other water source, be sure the end of the hose stays above the spray solution in the tank. Backsiphoning can occur when the end of the fill hose or pipe falls below the level of the solution in the tank and there is a drop in water pressure. Use an approved anti-backsiphoning device or an air break in the water system.
- 13 **Calibrate Application Equipment Properly** – Frequently check and maintain spray nozzles, hoses, gauges and tanks. Proper calibration is the key to applying accurate rates of pesticides. Improper calibration can result in too much or too little product application, irregular distribution and poor pest control. Inaccurate tank volumes and pressure gauges or worn nozzles also may cause improper application. Inspect application equipment before every use.
- 13 **Delay Pesticide Application If Heavy Rain Is Forecast** – Pesticides are most susceptible to runoff from heavy rains during the first several hours after application.
- 13 **Avoid Overspray And Drift** – Check the pesticide label for application precautions or restrictions during windy conditions. Wind speed, temperature and humidity all affect pesticide spray drift. Drift can be reduced by lowering boom heights and using nozzles that produce large droplet sizes.
- 13 **Store Pesticides In A Safe Place** – Pesticides need to be stored in a secure place and should be stored in their original containers with the labels clearly visible. Pesticides must be stored at least 50 feet from any well unless they are stored in secondary containment.
- 13 **Properly Dispose Of Pesticide Containers** – Information about container disposal is on the pesticide label. Containers should be triple or pressured-rinsed thoroughly after use, punctured and disposed of in accordance with label directions or offered for recycling as part of the Connecticut Department of Agriculture's program. Sprayers should be cleaned at the application site whenever possible and at a safe distance from wells, lakes, streams and storm drains. The rinsate should be sprayed on site that is listed on the pesticide label or used as makeup water in the next tank mix. Be sure label rates are not exceeded.
- 13 **Develop An Emergency Response Plan** – Anyone who stores, handles or uses pesticides should have an emergency response plan in case an accident occurs.

For further information on BMP's, contact the Department of Energy and Environmental Protection Bureau of Materials Management and Compliance Assurance, Pesticide Management Program, 79 Elm Street, Hartford, Connecticut 06106-5127 or online at <http://www.ct.gov/deep>