

## EHHI's Recommendations for Residential Well Testing

### *Wells Should be Tested for:*

- 1. Bacteriological Quality:** Total Coliform Organisms
- 2. Physical Characteristics:** Color, Turbidity, Odor, pH
- 3. Chemical Characteristics:** Nitrate/Nitrite, Chloride, Sodium, Iron, Hardness, Manganese

*Numbers 1-3 are the Connecticut Department of Public Health's Drinking Water Guidelines.*

- 4. Volatile Organic Chemicals (VOCs):** As listed in the Connecticut Department of Public Health Code 19-13-B102.

#### **5. Pesticides:**

***Insecticides:*** carbaryl, chlordane, chlorpyrifos, DDT-DDE, diazinon, dicofol, isenphenfos, lindane, malathion and methoxychlor;

***Herbicides:*** dicamba, 2,4-D, dacthal (DCPA), MCPA, MCPP and trifluralin;

***Fungicides:*** chlorothalonil.

***Additional Pesticides:*** if you live near land used for agricultural purposes you might want to broaden the list of pesticides you test for.

# Recommendations *for the State*

- The State should conduct additional studies that look at private residential wells to determine the magnitude of pesticide contamination in private wells.
- The State should add commonly used lawn and tree care pesticides to its present list of pesticides that are recommended for well water testing.
- The State should adopt aquifer regulations to protect Connecticut's groundwater from chemical contamination.



# Recommendations

## *for Towns and Municipalities*

- Towns and Municipalities should set the examples of protecting their groundwater and residential wells by instituting organic methods on town properties.
- Towns and municipalities should hold educational meetings for their citizens where lawn and tree care pesticides can be discussed and alternate pest control strategies can be explored openly. Pesticide information should be disseminated along with the short- and long-term health effects of these products.
- Communities as a whole should take responsibility for the preservation of the purity of citizens' drinking water. Citizens, as well as town officials, need to understand that lawn and tree care pesticides do travel down into groundwater, and that pesticides applied in one part of a community may affect the groundwater in another part of a community. Therefore, towns and municipalities need to be more involved with this issue.
- Towns and municipalities need to involve their local health departments in the preservation of the purity of drinking water wells. A town does not have to wait until its contamination levels are above drinking water standards to involve its health department. Communities should start to plan pesticide reduction strategies as soon as possible and solicit advice from their local health departments.

# Recommendations *for Citizens*

- People with private wells should take particular care to reduce their uses of pesticides. This study shows that these chemicals do indeed leach through the soil, and homeowners should be aware of the need to protect their drinking water.
- When professional lawn or tree care companies are used they should be asked if they know how to use organic methods that better protect groundwater.
- Pesticides should only be used on lawns and trees when there is a serious pest problem that cannot be remedied in any other way. Because pesticides are toxins, their use should be minimized, with the knowledge that there is no guarantee of their safety with respect to long-term health effects.
- If a pesticide is applied to your property, ask for the name of the chemical and its long-term health effects.
- If you have a private well and you live in an area where there is heavy use of lawn and tree care pesticides, have your well tested for pesticides. If they are found you might want to inquire about installing a filtration system.



- Wells should be maintained, including checking the well seal and the well cap. Bacteria and nitrogen levels should be checked periodically, as they are often a symptom of structural problems with the well itself.



- Ask your town to provide educational meetings for its citizens to discuss lawn and tree care pesticides. This issue is important to the entire town as our study shows that pesticide practices in one part of a community may affect the groundwater in another part of the community, often in an unpredictable way. Communities as a whole need to take more direct responsibility for the preservation of the purity of their citizens' drinking water.

- Ask your town if they would use organic methods, limit lawn and tree care pesticide use on town grounds and buildings, and help the community learn the importance of reducing pesticide uses. This study shows the interdependency of us all.