Landowner's Survey:

What's the Risk to Your Water from Pesticides?

Utah Farmstead Assessment for Ground Water and Surface Water Protection

Survey 2 **Revised March 2012**

Pesticides play an important role in agriculture and in maintaining our homes, lawns, and gardens. Unfortunately, pesticides are showing up where they're not wanted – in our drinking water and our surface waters. If pesticides are not handled carefully, they can seep through the ground after a leak or spill, directly enter a well during mixing and loading, or drain to a stream or lake.

If pesticides enter a water supply in large quantities they can cause immediate and severe health problems. A more common and less apparent threat comes from pesticides that enter water supplies in small quantities. This type of contamination often occurs slowly due to handling practices that allow small amounts of pesticides to be spilled repeatedly. Repeated pesticide exposure can pose serious health risks to humans, livestock, and wildlife. Unfortunately, once pesticides are in the water supply, removing them is expensive and at times impossible. The easiest way to avoid health issues and legal problems associated with pesticide contaminated water is to take appropriate precautions to avoid contamination.

INSIDE:

HOW TO USE THIS SURVEY

This survey asks a series of questions dealing with common risks from pesticides to water quality. The survey is divided into different sections to help you identify the specific practices or conditions on your farmstead or acreage that should be addressed to reduce risk of water contamination.

The results of this survey are intended to provide general information and recommendations regarding practices and potential risks to water quality. Keep this survey as your private record and use it as a guide to taking action to reduce these risks.

WATER QUALITY
UTAH STATE UNIVERSITY EXTENSION
Water is Life : Quality Matters

UtahStateUniversity
COOPERATIVE EXTENSION

See Glossary in Fact Sheet #6 for clarification of terms in this survey.

SURVEY INSTRUCTIONS

For each question circle the answer that best describes your situation. At the end of each section add together the numbers that correspond to each answer. When you have completed the survey, add together the section totals for the total risk assessment score.

Mixing and Loading Practices

1. Where do you get the water that you mix with pesticide?
   - a water tank (1)
   - directly from well (3)

2. What is the minimum distance between any pesticide mixing or loading area and a well or surface water?
   - greater than 100 feet (1)
   - between 20 and 100 feet (2)
   - less than 20 feet (3)

3. Are all pesticide mixing/loading areas downslope from existing wells?
   - Yes (1)
   - No (3)

4. What precautions do you take to prevent back-siphoning?
   - permanent air gap (3)
   - water tank separate from well (3)
   - anti-backflow devices (2)
   - none of the above (1)

5. Have you ever dropped a water supply hose below the fluid level in a mixing tank?
   - No (1)
   - Yes (3)

6. Is someone present during pesticide mixing/loading operations to watch for spills, mishaps and to take corrective action?
   - present entire time (1)
   - present most of the time (2)
   - start filling, leave and return after set time (3)

7. Have you ever had a spill that you did not clean up?
   - No (1)
   - Yes (3)

8. Are there signs such as dead vegetation that indicate chemical movement away from the mixing/loading area?
   - no signs, vegetation healthy (1)
   - some patches of dead vegetation (2)
   - permanent dead vegetation (3)

9. What is the condition of the mixing/loading area?
   - concrete pad with curbs / no cracks, or sealed cracks (1)
   - concrete pad / no curbs, no cracks (2)
   - no pad, soil or gravel surface (3)

Mixing and Loading Practices section total _____

Storage

10. Are most of your pesticides stored within 100 feet of a well?
    - No (1)
    - Yes (3)

11. Are most of your pesticides stored within 100 feet of surface water?
    - No (1)
    - Yes (3)

12. Is your pesticide storage locked to prevent accidental valve opening or vandalism?
    - Yes (1)
    - No (3)

13. What type of floor does your pesticide storage have?
    - sealed concrete floor (1)
    - unsealed concrete floor (2)
    - soil or gravel floor (3)

14. Are there inside drains in the pesticide storage area?
No (1)
Yes, drain has sump (1)
Yes, drain runs out back of building (3)
Yes, drain runs to city sewer (3)

15. Do you store any canceled or banned pesticides?
No (1)
Yes, store in its own secondary containment (a can in another can to catch leaks) (1)
Yes, not stored in any special manner (3)

16. In case of a fire, is your fire department informed on the location of your pesticide storage area, and do they know it could be better to allow the fire to burn rather using water?
Yes (1)
No (3)

Storage section total _____

Cleanup and Container Disposal

17. Where do you apply the rinsate from pesticide sprayers?
field (1)
farmyard, more than 100 feet from well (2)
farmyard, less than 100 feet from well (3)

18. Where do you clean pesticide application equipment?
field (1)
farmyard, more than 100 feet from well (2)
farmyard, less than 100 feet from well (3)

19. Do you triple rinse pesticide containers prior to disposal?
always (1)
sometimes (2)
never (3)

20. Where do you dispose of pesticide containers?
recycle or take to appropriate landfill (1)
farm dump or burn pile on farm (3)

Cleanup and Container Disposal section total _____

Other Management

(circle Yes or No)

Do you store all pesticides in the same area? Yes No

Do you use pesticide containers for other purposes? Yes No

Is the pesticide storage area clean and neat? Yes No

Do you keep a current pesticide inventory onsite? Yes No

Are pesticide containers marked with the purchase date? Yes No

Are materials separated by type (herbicide, insecticide)? Yes No

Are pesticides stored in the original containers? Yes No

Are pesticides stored off the floor and low to ground? Yes No

Are dry formulations stored on pallets? Yes No

Are storage areas free of spills or leaks? Yes No

Do you have a shovel and absorbent materials readily available? Yes No

Are "Keep Out" signs posted? Yes No

Is the storage area well-lit and ventilated? Yes No

Is there pesticide safety equipment in the pesticide storage area? Yes No

Total number of Yes answers: _____

Total number of No answers: _____

If you had all Yes answers your score is 0. If you had more Yes answers than No, your score is 1. If you had more No answers than Yes, your score is 3.

Other Management section total _____

RISK RATING

Add the following totals:	Low	Moderate	High
Mixing and Loading Practices section total _____ x 3 = _____	81	54	81
Storage section total _____ x 3 = _____	21	42	54
Cleanup and Container Disposal section total _____ x 5 = _____	20	40	60
Other Management section total _____ x 10 = _____	10	20	30

SURVEY 2 TOTAL SCORE _____

SURVEY 2 TOTAL SCORE	78	156	225
TOTAL RISK LEVEL	Low	Moderate	High

INTERPRETING YOUR RISK RATING

Locate your total risk score on the spectrum above to get a general idea of the risk pesticide are posing to water sources on your farmstead or acreage.

Next, compare your risk scores for each section with the ratings (Low, Moderate, and High) for the individual sections to determine the practices where your risk is moderate to high.

For these sections go back into the survey and look at the questions for which you marked a low scoring choice. These are the areas you should address first to reduce risk of water contamination.

Follow Up

Refer to Fact Sheet # 2-How to Protect Your Water From Pesticide Contamination for contacts and information about pesticide management. Contact your Utah State University county Extension office, or the Extension web page http://www.extension.usu.edu for more information.