

OKLAHOMA

Farm & Ranch*A*Syst

Worksheet 2

Assessing the Risk of Ground Water Contamination from Pesticide Storage and Handling

Why should I be concerned?

Pesticides are showing up where they're not wanted—in our drinking water. If pesticides are not handled carefully around the farmstead, they can seep through the ground after a leak or spill, or they can enter a well directly during mixing and loading.

Pesticides play an important role in agriculture. They have increased farm production, and they have enabled farmers to manage more acres with less labor. Taking voluntary action to prevent pesticide contamination of ground water will help ensure their continued availability for responsible use by farmers.

Whether you are affected by a pesticide or not depends on the toxicity of the pesticide and your level of exposure to it. The severity of your exposure is based upon the amount you swallow, breathe in, or absorb through the skin; your body size; and the length of time you are in contact with the pesticide.

The goal of the Oklahoma Farm & Ranch*A*Syst program is to help you protect the ground water that supplies your drinking water.

How will this worksheet help me protect ground water?

- * It will take you step by step through your pesticide storage and handling practices.
- * It will rank your activities according to how they might affect the ground water that provides your drinking water.
- * It will provide easy-to-understand rankings that will help you analyze the “risk level” of your pesticide storage and handling practices.
- * It will help determine which of your practices are reasonably safe and effective, and which practices might require modification to better protect your drinking water.

How do I complete the worksheet?

1. Use a pencil. You may want to make changes.
2. For each category that is appropriate to your farm or ranch, find the statement that best describes your conditions. (Leave blank categories that don't apply.)

3. Look to the right of the statement under “score” and circle 3, 2, or 1.
4. Add all circled scores to obtain the total score for the worksheet.
5. Using your total score and the ranges provided at the end of the worksheet, mark your risk rating in the appropriate box for low, moderate, or high risk.

The procedure doesn't take long to complete.

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PESTICIDE STORAGE	SCORE (circle)
Location of Storage Facility	
Low Risk: 100 ft. or more downslope from well.	1
Mod. Risk: 50 to 100 ft. downslope from well.	2
High Risk: Within 50 ft. downslope or within 100 ft. upslope from well.	3
Containment System	
Low Risk: Impermeable floor (i.e., sealed concrete or steel) with curb or sump installed to contain leaks and spills.	1
Mod. Risk: Covered area, impermeable floor without curb, or moderately permeable floor (i.e., unsealed concrete).	2
High Risk: Gravel or dirt floor.	3
Amount Stored at One Time	
Low Risk: Less than one gallon or 10 pounds stored at any time.	1
Mod. Risk: More than one gallon (but less than 55 gallons) of concentrate. Or, more than 10 pounds (but less than 550 pounds) of dry pesticide.	2
High Risk: More than 55 gallons or more than 550 pounds of dry pesticide.	3
Formulation of Products (liquid or dry)	
Low Risk: Mostly dry formulation.	1
Mod. Risk: Some liquid formulation. Some dry formulation.	2
High Risk: Mostly liquid formulation.	3
Containers	
Low Risk: All materials in original containers. All containers in good condition and clearly labeled.	1
Mod Risk: Some materials in questionable containers.	2
High Risk: Containers in poor condition and susceptible to leakage. Labels are hard to read.	3
Security	
Low Risk: Fenced or locked area separate from all other activities.	1
Mod. Risk: Fenced area separate from most other activities.	2
High Risk: Open access to theft, vandalism, children, and livestock.	3

PESTICIDE MIXING AND LOADING

Location of Mixing/Loading Area	SCORE (circle)
Low Risk: 100 ft. or more downslope from well.	1
Mod. Risk: 50 to 100 ft. downslope from well.	2
High Risk: Within 50 ft. downslope or within 100 ft. upslope from well.	3

PESTICIDE MIXING AND LOADING (con't.)	SCORE (circle)
Containment of Rinsate and Spills in Mixing/Loading Area	
Low Risk: Sealed concrete pad with curb and sump to collect spills.	1
Mod Risk: Unsealed concrete pad with curb.	2
High Risk: No pad, permeable soil.	3
Water Source	
Low Risk: Separate water tank used to fill sprayer.	1
Mod. Risk: Sprayer filled from hydrant 100 ft. or more from well.	2
High Risk: Sprayer filled from hydrant near well.	3
Backflow Prevention on Water Supply	
Low Risk: Backflow preventer in line and fill hose kept above tank.	1
Mod. Risk: Backflow preventer in line, hose in tank above waterline.	2
High Risk: No backflow preventer, hose below waterline.	3
Filling Supervision	
Low Risk: Constant supervision during sprayer filling.	1
Mod. Risk: Sprayer checked occasionally during filling.	2
High Risk: Sprayer left unattended during filling.	3
Sprayer Cleaning and Rinsate Handling	
Low Risk: Sprayer washed out on pad or in field, rinsate stored for use, labeled "use later."	1
Mod. Risk: Sprayer washed out near well, rinsate sprayed on field.	2
High Risk: Sprayer washed out near well, rinsate dumped near well.	3
Container Disposal	
Low Risk: Containers triple rinsed and returned to dealer for recycling or disposed in licensed landfill.	1
Mod. Risk: Unrinsed containers disposed in licensed landfill.	2
High Risk: Unrinsed or partially filled containers dumped on farmstead.	3

TOTAL SCORE:

Check the appropriate overall risk category of your pesticide storage and handling system based on your total score.

Low Risk (13-20) Mod. Risk (21-31) High Risk (32-39)

* **Low Risk**—Your system is generally functioning well, but a few improvements could be made. Look at those areas where your assessment of risk was greater than the "low risk" category and identify which improvements could be made.

* **Moderate Risk**—Several deficiencies need improvement. Identify areas where your rating was greater than "low risk." Areas rated as "high risk" should be improved as soon as possible.

* **High Risk**—Your system has several serious problems and major changes are needed. All areas rated as "high risk" should be improved immediately. Continued use of your current system could pose a serious threat to your family's water supply.