Pesticide Odor

At a Glance

- All odors represent exposure to a chemical.
- If a pesticide application is causing an odor problem, call your County Agricultural Commissioner. Get the number by calling 1-87PestLine (1-877-378-5463).
- If you or someone else is sick and it is an emergency, call 911.

Because chemical vapors are invisible, odor may be the only way people have of knowing they have been exposed to a chemical.

Odors surround us, some pleasant and some not. Being able to smell an odor doesn't always mean there is a health risk. At the same time, many chemicals – including some pesticides – have odors that can be bothersome. In some cases, chemical odors can make people sick or affect their quality of life.

If a pesticide odor is causing problems for you, call the County Agricultural Commissioner to report it. It is important for us to know what impact pesticide odors have had on you, so we can do something about it.

All odors represent an exposure to a chemical. The chemical you smell may not be the pesticide active ingredient itself. Pesticide products contain a number of ingredients – the "active ingredient" that targets the pest, solvents to dilute the formula, and other ingredients designed to make the product work better. Any one of them may produce a sickening odor.

Odor also may be related to a breakdown product (*see box, right*), a warning agent (a smelly substance added to make

What is a breakdown product?

A breakdown product is the result of a chemical breaking apart into other chemicals. Some kinds of pesticides break down when exposed to sun or rain, or to bacteria found in soil. The breakdown is a natural process that may produce a compound that is more or less toxic than the original chemical. Many common pesticide breakdown products contain sulfur, which has a particularly bad smell.

Pesticides typically contain several ingredients, any one of which may produce a sickening odor.

otherwise odorless products easier to detect), or a chemical added to the formula to hide a bad odor.

Finding the source of a pesticide odor or why it occurred can be difficult. Two pesticide applications may be almost identical in how they are done, yet one results in odor problems and the other does not.

Who do I call when an application is causing an odor?

If you see an application that you suspect is causing the odor, or if a pesticide odor has made you or someone else sick, call your County Agricultural Commissioner. (You can find the phone number on the inside back cover of this booklet, or by calling 1-877-378-5463, 1-87PestLine.) A biologist representing the commissioner will look into your complaint. The biologist will ask you several questions, including:

- The time you noticed the odor.
- Description of odor. Try to associate the odor with something familiar such as rotten eggs, sweet or sour chemicals, petroleum, garlic, or chlorine. Some other useful descriptions are *oily, metallic, sharp, burning, light* or *heavy.*
- Names and addresses of other people affected, if you know. Description of any illness symptoms (for example, nausea, teary eyes, difficulty breathing).
- How long the odor lasted.
- Wind direction, if you know.
- Any information that will relate the problem to a specific source or operation.

If there is an odor but no application in view, the Commissioner's office biologist will take your complaint and review their files to try to find nearby applications that may have caused the odor. Even if the odor is gone when the biologist takes your report, he or she will try to determine the cause.

For more information, please turn to page 23, *Reporting Pesticide Incidences and Illnesses.*

If I notice a pesticide odor, does that mean the pesticide was applied incorrectly?

Not necessarily. It is possible to smell odors with lawful applications. However, odor can also indicate a problem. An investigation is required to determine if an odor resulted from an applicator not following the rules or not applying the product correctly.

The County Agricultural Commissioner investigates to decide if the applicator followed the rules. If the Commissioner finds a violation, he or she can issue fines and other penalties against the applicator.

But even if the commissioner finds the applicator followed the rules, the problem will not be dismissed without further investigation. The odor may have several causes, such as:

- The product formulation may contain one or more odorous substances.
- The use instructions on the product label may not be adequate to prevent problem odor.
- Many pesticide applications may have occurred in the same area.

All products made with a certain active ingredient may share the odor problem, or it may be limited to certain products, depending on what other ingredients they contain. A product made by one company may produce strong odors while a very similar product made by a different company, using a different method, does not.

We at DPR look into product-related problems. After reviewing reports from County Agricultural Commissioners on odor incidents and collecting other data, we may require the manufacturer to make changes to fix the problem.

PRECAUTIONARY STATEMENTS

Hazards To Humans & Domestic Animals
CAUTION:
Harmful if absorbed through skin or inhaled. Avoid contact
spray mist. Wash thoroughly with soap and water after
clothing before reuse. Avoid contamination of feed and
Environmental Hazards: This product is toxic to fish.
Physical and Chemical Hazards: Contents under
Do not puncture or incinerate container. Exposure to
not use this product in conduits, motor housings,
because of possible shock hazard. Do not use on

FIRST AID:
IF ON SKIN OR CLOTHING:
Take off contaminated clothing.
Rinse skin immediately with plenty of water for
Call a poison control center or doctor for treatment
IF INHALED:
Move person to fresh air.
If person is not breathing, call 911 or an

Some pesticide odors may occur when the use instructions on the product label are not adequate to prevent problems.

County Agricultural Commissioners can put additional restrictions on a farmer's use of restricted materials, for example, prohibiting the use of certain pesticides near playgrounds when children are likely to be present.

For pesticides classified as restricted materials, we may also suggest to the County Agricultural Commissioners that they put extra controls on how a product is used. These restrictions, designed to be part of the county permit to use the pesticide, can include buffer zones between the application site and places where people live, work, or play. Or an application may not be allowed when the weather increases the chance of odor problems, such as when it is hot, breezy, or there is a low-level inversion layer (a layer of warm air that keeps air under it still and close to the surface). The controls chosen depend on the application site, the particular chemical, and how it is usually applied.

About the human sense of smell

The human sense of smell depends on receptors in the nose being exposed to a chemical. When people smell pesticide odors, they are being exposed to a chemical, although not necessarily the pesticide chemical itself. It may be a solvent (a substance that dissolves other chemicals), a breakdown product, or a warning agent added to give products a noticeable smell.

The ability to detect the odor of a specific chemical varies from person to person, and depends on other conditions such as how often a person is exposed to the odor. People who are often exposed to a certain odor may become insensitive to it – or more sensitive. If you become insensitive to an odor, you may be surprised that other people can smell the odor when you cannot. If you become extra sensitive, you may smell the odor when others do not notice it. There are also differences in chemicals – some chemicals have very low "odor thresholds" and can be detected at very low levels, sometimes lower than the most sensitive monitoring equipment can detect.