# Clemson University **Department of Pesticide Regulation**

# Selecting a Subterranean Termite Treatment For Your Home



Department of

Pesticide Regulation

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# A Guide for Consumers Considering Subterranean Termite Treatment Options

Consumers should take several factors into consideration when choosing a treatment method to protect their home from subterranean termite infestation. This publication discusses the pros and cons of subterranean termite bait technology, conventional soil-barrier treatments (liquid termiticides), and the use of borate wood treatments. These are very different approaches to controlling termites. All of these methods, when properly applied, have proven effective in protecting structures from subterranean termites.

South Carolina has detailed regulations that set forth standards for the control of subterranean termites. Clemson University's Department of Pesticide Regulation is responsible for enforcing those regulations in South Carolina. The following are our responses to frequently asked questions by homeowners considering what type of treatment to use.

#### **How Do Termite Baits Work?**

Termite baits exploit the foraging, feeding, and food-sharing behavior of worker termites to spread small amounts of active ingredient throughout the colony. This results in a reduction in the number of foraging termites. As the population of the colony declines, so does the risk of its infesting nearby structures. This is accomplished by consistent and timely inspections of the structure and the termite bait stations for as long as your pest management professional has the property under contract. Therefore, termite baiting is best described as a "process" and not an "event."

#### **How Do Liquid Termiticides Work?**

Liquid termiticides are used to establish a chemical barrier in the soil around the structure's foundation. Termites are almost always present in South Carolina soil, but a properly established chemical barrier can prevent them from gaining access to the structure.

#### **How Do Borates Work?**

The borate pesticides are used for termites control in a completely different way. These

products are applied as a liquid; however, the application is made directly to the wood and not to the soil. This results in a residue of the borate on and in the wood. Research has shown that the termites will not tunnel over more than about 1 - 1 1/2 feet of borate-treated wood. The most effective time to make this application is during the construction of a building because the applicator has access to all framing lumber so that a more complete treatment can be done at that time. However, it is possible to make an application of a borate termiticide after the construction is completed. This would, of course, only be appropriate for a structure with a crawl-space which allows access to the wooden floor system.



I'm not a welcome house guest! Get your house treated!

#### What are the Advantages of Using Termite Baits?

The baiting system is a very target-specific approach to controlling termites and greatly reduces the amount of pesticide that is applied. In addition, some structures contain building features that make the use of liquid termiticides more difficult, more expensive, or simply impossible. These features include wells inside the foundation, numerous expansion joints between slabs, or large amounts of foam insulation in contact with the ground. Termite baits may be more suitable in these situations. In environmentally sensitive areas or in sites close to water sources where liquid termiticide may have a potential to contaminate groundwater, bait stations may be the best choice. Termite baits may also be more appropriate for situations where "chemical sensitivity" is a concern.

### What are the Disadvantages of Using Termite Baits?

Bait stations must be located and fed upon by the termites before control begins, and during this time some additional damage may occur. They must also be inspected frequently (usually monthly or quarterly) to ensure that either bait or, if appropriate, a monitoring device is still present and that the termites are actually visiting the bait stations. The inspection of these stations must continue for the entire time the structure is under contract. Bait stations usually require monitoring at monthly intervals during the initial period following installation, as opposed to an annual inspection typical of liquid treatments.

#### What are the Advantages of Using Liquid Termiticides?

The technology for treating houses with liquid termiticides has been in use for many years. Liquid termiticides create a chemical barrier of treated soil around the foundation of the structure that prevents the termites from gaining entry. If the barrier is complete and remains undisturbed and no above-ground sources of moisture are present, control is usually rapid and relatively long-lasting (five years or more).

#### What are the Disadvantages of Using Liquid Termiticides?

Liquid termiticides may not be well-suited for certain situations for many reasons. Since liquid termiticides exclude termites from a structure but do not reduce the size of the colonies in the soil, any disturbance or deterioration of the chemical barrier around the foundation can allow re-infestation to occur. In addition, if all above ground sources of moisture are not eliminate, it is possible for termites trapped in the structure to form secondary or "aerial" colonies, and they will continue to cause damage.

#### What are the Advantages of Using Borate Treatments?

Borate products work as a long-term treatment for structures. Once the product saturates the wood, it is generally there for the life of the structure. As discussed, borate products are not highly toxic to pets and people. They are fairly easy to apply, and if applied in sufficient concentrations, they are generally effective against termites. Another advantage of borate products is the fact that they can help to control wood boring beetles, carpenter ants, carpenter bees, and wood decay fungi.

### What are the Disadvantages of Using Borate Treatments?

The use of borate products does not provide for any product to be applied to the soil around a structure. Thus, measures must be taken to ensure termites do not gain access to the structure and its contents since there is no barrier to prevent them from attacking the untreated wood of the building. It is especially important for a pest management professional to do a thorough structural inspection each year to make sure that the termites have not managed to gain access to the structure. While these products are labeled as "stand alone"—meaning they can be used without any other treatment—many pest control companies choose to make a limited application of another termite control method to supplement the borate treatments.

#### What Type of Service Agreement Should I Expect for Termite Baits or Borate Products?

In South Carolina, pest control operators who use baiting technology must disclose certain information on a separate disclosure form to be signed by their customers. This information ensures that customers understand that no barrier will be established between the structure and the soil, that it is possible for additional damage to occur before the bait becomes effective, and that re-infestation may occur unless careful monitoring, structure inspection, and bait replacement is performed regularly. Additionally, the standards that apply to conventional treatments must be waived in writing.

The Department of Pesticide Regulation always recommends that a termite warranty provides for the repair of damage. However, some companies may only offer re-treatment and not damage repair contracts.

#### What Type of Service Should I Expect for Liquid Termiticides?

Warranties generally are renewable, and the length of the warranty period and the price charged for the annual renewal within that period varies depending on the company's assessment of the risks involved. The Department of Pesticide Regulation **neither** recommends **nor** sets pricing for individual pest control companies.

#### What about the Price Difference between Termite Baits and Liquid Treatments?

Decisions about treatment methods should not be based solely on the cost of the treatment. Many pest control companies offer free estimates and should be willing to sit down with you and explain exactly what you are getting for your money. The cost of a treatment is based upon the size of the structure, the way it is built, and the company's assessment of the risk of termite infestation.

## How Do I Choose a Pest Control Company?

Friends, neighbors, and co-workers are often excellent sources for referrals. You may also want to ask the company you are considering for references. DPR does not recommend one company over another, but we do maintain records of the enforcement histories of all firms that do business in the state. These records are available to you upon request. Request forms are available on our web site at http://dpr.clemson.edu or by calling 864.646.2150.

#### Are Liquid Termiticides Going to be Banned?

Neither the Department of Pesticide Regulaiton nor the Environmental Protection Agency (EPA) has plans to ban all liquid termiticides. New liquid termiticides continue to be registered and introduced into the marketplace. Liquid termiticides may routinely be used in conjunction with termite baiting to protect your structure. In fact, having you house treated—by whatever method—and placed under warranty with a reputable pest control company is considered an advantage in most real estate transactions.

## How Can the Department of Pesticide Regulation Help Me?

The Department of Pesticide Regulation ensures that pest control operators meet a minimum level of competence by requiring that they pass a comprehensive certification exam and demonstrate financial responsibility for property damage and public liability. Our field staff routinely conducts structural inspections to establish whether the minimum standards have been completed. Our inspectors also respond to complaints regarding termite treatments or other aspects of pesticide use. Enforcement actions, including warning letters, verbal warnings, civil penalties, and even criminal prosecutions are taken when necessary to encourage compliance with the regulations.

#### **Checklist for Hiring a Pest Control Company**

- Get several bids from different pest control companies.
- Ask the company for references and check them out. Ask friends and neighbors to recommend a firm.
- Get a termite contract. Contracts are usually written for a specified number of years. The most useful cover damage, namely treatment and repair.
- Ask how long the contract will be in effect and that kind of coverage you have.
- Have your house inspected regularly for termites.
- A licensed company must place its yellow pesticide sticker (in the shape of the State of South Carolina), company name, business license number, and location on company trucks.
- To learn whether a firm is licensed, call the Clemson University Department of Pesticide Regulation at 864.646.2150.
- Call the Department of Pesticide Regulation to learn whether a company has a history of violations or to file a complaint.



# Don't let this happen to you!

Have a licensed PCO to perform <u>regular</u> inspections on your home.



The Department of Pesticide Regulation has eleven field offices in South Carolina.

### **DPR Field Locations and Numbers**

| Anderson           | 843.494.2332      |
|--------------------|-------------------|
| Aynor              | 843.957.1727      |
| Beaufort 843       | .255.6060 Ext 111 |
| Charleston         | 843.225.7065      |
| Clemson            | 803.260.1462      |
| Columbia 803       | .736.7680 Ext 112 |
| Florence           | 843.667.1393      |
| Newberry           | 803.403.7262      |
| North Myrtle Beach | 843.360.1512      |
| York               | 803.628.0303      |

As part of Regulatory and Public Service Programs at Clemson University, the Department of Pesticide Regulation has been serving the State of South Carolina for over a century. We license pesticide dealers, private and commercial applicators, and pest-control businesses. We register pesticide products for use in the State and perform quality assurance analyses of pesticide formulations. DPR protects farm workers from pesticides by administering the Federal Worker Protection Standard in South Carolina.

The Department of Pesticide Regulation administers the State Groundwater Protection Plan, the Pesticide Container Recycling Program, and the Integrated Pest Management in Schools Initiative. The Federal regulations that protect endangered species from pesticides have also been assigned to the DPR.

We are the enforcement and investigative authority in the State for pesticide use, alleged pesticide misuse, substandard termite treatments, and the Wood Infestation Report required in most real estate transactions.