

## **PTI-2.2: Termiticides**

**Updated February 2020**

### **Background**

Frequent and inconsistent changes to termiticide labels (both conventional liquids and baits) have created significant confusion among applicators of these products. The Nebraska Department of Agriculture (NDA) requires that all termiticide treatments be applied according to the label in order to provide the best possible protection of the structure while reducing human and environmental adverse effects. To this end, NDA will utilize the following terms and definitions when interpreting termiticide labels.

### **Interpretation**

**Conventional Liquid Termiticide:** Conventional liquid termiticides are those chemicals designed to be diluted in water and applied such that a continuous chemical barrier is established in the soil or structure. These products are further identified as repellent or non-repellent types. Both types of termiticides have shown they provide adequate protection of the structure when applied as complete treatments following label directions.

**Termite Bait Systems (Definition and Installation):** Termite bait systems are designed so the stations are installed at regular intervals around and sometimes inside of the structure's foundation. Because the directions for use listed on the product label include the installation, monitoring, and introduction of the chemical bait, these activities are considered part of the pesticide application. The action of installing and monitoring bait stations and active ingredient baits is considered a structural pesticide application, therefore all certification and record keeping rules apply. Where bait system label instructions indicate "regular" monitoring should occur (without specific time frames listed for the frequency of monitoring), NDA defines this to mean monitoring will occur at least four times per year, or as recommended or required by the manufacturer during seasons where termite activity can be expected, both before and after the active ingredient is introduced; but not during periods when soils are frozen or other environmental conditions would disrupt the bait station. Unless specifically identified on the label, bait systems are not considered complete treatments when installed as the exclusive method of termite control.

**Complete or Full Treatment:** Traditionally, a complete or full treatment was defined as treatment of the exterior perimeter foundation, interior sub-slab or crawlspace areas, and injection into wall voids. Current labels have moved away from using the terms "complete" or "full," however, termite control contracts still use these terms. Therefore, NDA believes a definition is still warranted so structural applicators have an understanding of what NDA expects for compliance with termiticide labels.

A complete or full treatment is one in which a continuous chemical barrier is established around the exterior perimeter foundation, interior sub-slab or crawlspace areas, and injected into wall voids of the structure's foundation wall, so the entire structure is protected from termite invasion. Termiticide labels that specifically define a complete or full treatment are compliant with NDA's definition. In cases where labels do not specifically identify what a complete or full treatment is, and a complete or full treatment is sold or contracted to the property owner, NDA expects the termiticide to be applied as described above. For structures with secondary attached rooms (such as garages, sunrooms, or porches), NDA considers the shared foundation wall between the attached room and the occupied structure as part of the exterior perimeter, and it should be treated to the depth required for an exterior basement wall.

If a bait system label indicates it is a complete or full treatment when properly installed, NDA expects applicators to install bait stations spaced at the interval specified by the label, in a manner that protects both exterior and interior structural zones, as per label directions. While NDA currently has no regulations regarding service contracts, NDA considers documents specifying a "complete" or "full" treatment to be part of the pesticide application record identifying the site or area treated. In cases where the termiticide label allows for reduced treatment (such as an exterior perimeter with localized interior treatment), any document stating otherwise would be considered erroneous record keeping.

Contracts for termite treatments will be taken into consideration when determining compliance of applications made according to label directions.

**Exterior Perimeter with Limited Interior, Spot, or Partial Treatments:** Several conventional liquid termiticides allow for a reduced treatment, sometimes called an “exterior perimeter/localized interior” or “exterior perimeter/interior spot” treatment. Structures which share foundation walls with attached garages or other structures must have the shared wall treated as an exterior wall. Spot or partial treatments are those which involve interior or exterior localized areas of a structure infested with termites and which are made to establish or re-establish a continuous chemical barrier to protect the structure. New termiticide labels include aerial mud tubes on previously untreated soil in crawl spaces in this use type. Unless otherwise specified on the label, NDA believes the pest management professional should determine the appropriate distance to be treated, but it should not be less than two feet on either side of the termite activity.

**Trench and Rod:** Most liquid soil-applied termiticides require the product to be applied to a trench dug in the soil, or a trench with deep rodding into the trench, then flooding the trench. An exception to this would be in situations where site conditions (soil, structure, or landscaping) would prevent trenching. NDA expects that exterior wall treatments greater than one foot in depth must incorporate both a trench and a rod application in order to ensure that a complete chemical barrier is created. Trenches must be made by excavating and removing the soil to a depth adequate to hold liquid termiticide while backfilling the excavated soil, unless site conditions or label directions dictate otherwise. Injection of liquid termiticide by rodding must be done continuously from top surface to required depth, with equipment sufficient to reach the depth required for the structure (in other words, a three-foot rod cannot feasibly treat to a four-foot depth).

**Retreatment:** Conventional liquid termiticide labels usually indicate that retreatment of the structure is only allowed for reinfested areas, and do not require a complete treatment. These same labels also frequently fail to indicate how much of the structure should be retreated or how much time should elapse before a complete treatment can again be made. Given that all conventional liquid termiticides are required by the EPA to demonstrate a minimum of five years of control, NDA believes this is an appropriate minimum period of time after the last complete treatment before another complete treatment can be made. If a reinfestation occurs before the five-year period expires, NDA expects the applicator to treat the infested area as a spot or partial treatment, as defined above, unless conditions for effective control warrant a larger portion of the structure be treated. New liquid termiticide labels allow for spot treatment as a supplement to any previously applied non-borate termiticide, no matter when it was applied. NDA does not support this method of application, but recognizes it cannot further restrict clearly defined label use language.

**Calculation of Application Volume:** All liquid termiticide labels require a given volume of tank mix solution be applied per linear foot of wall, multiplied by a vertical distance in feet (typically either two or four gallons of solution applied per ten linear feet of wall per foot of depth, and assuming a six-inch wide band of soil.). In order to comply with label requirements, liquid termiticide application volumes must be calculated using both linear distance and depth of treatment, not the square footage of the structure’s “footprint.” Frequent calibration of application equipment should be done so that inadequate or excessive volume is not applied.

For additional information, you can contact the NDA’s Pesticide Program:

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### **Fine Print**

Title 25, Chapter 2, Nebraska Administrative Code, §010 states:

“Technical Interpretations. Pursuant to §2-2626(3)(f) of the Pesticide Act, NDA may, as it deems necessary or appropriate, issue technical interpretations that provide further guidance and policy on the use of pesticides to minimize or mitigate potential or documented negative impacts on humans or the environment. Section 010.02 states that technical interpretations shall provide guidance regarding use inconsistent with the pesticide label as set forth in §007.01D. In layman terms, this means that a use of a pesticide contrary to this Technical Interpretation constitutes a violation of the law, which can be enforced by fines or penalties. NDA has determined this Technical Interpretation in no way modifies any pesticide label from its original, EPA-registered language.