



Steve Troxler  
Commissioner

North Carolina Department of Agriculture  
and Consumer Services  
*Structural Pest Control and Pesticides Division*

James W. Burnette, Jr.  
Director

April, 2011

MEMORANDUM

To: Licensees, Certified Applicators, Registered Technicians, Property Owners, Builders, and Code Enforcement Officers

From: Jim Burnette, Director Structural Pest Control and Pesticides Division, NCDA&CS *JB*

Subject: Liquid Termiticide Treatment of Residential Property with Pre-Cast Concrete Foundation Walls

During the past few months several questions have arisen in regards to the Division's policy concerning pre-construction termite treatment of residential property with pre-cast concrete foundation walls. The Division's policy is that PEST MANAGEMENT PROFESSIONALS should NOT treat these structures with a liquid termiticide, and is derived from the following:

Termiticide Label Requirements, The N.C. Building Code, and The Structural Pest Control Committee Rules And Regulations, regarding residential buildings under construction.

1. Liquid termiticide labels are clear that a vertical and a horizontal barrier be established during treatment. Most labels contain language similar to the following:

***FOR PRE-CONSTRUCTION TREATMENTS, UP TO AND INCLUDING TREATMENT OF FINAL GRADE, DO NOT APPLY AT A LOWER DOSAGE AND/OR CONCENTRATION THAN SPECIFIED ON THIS LABEL.***

***Establish a continuous vertical treatment zone around all foundation elements including but not limited to foundation walls, pillars, pilasters and chimney bases. In addition, establish a vertical treatment zone around pipes, utility penetrations, and similar penetrations in floor slabs.***

***Create a horizontal barrier wherever treated soil will be covered by a slab, such as footing trenches, slab floors, carports, and the soil beneath stairs and crawl spaces.***

***Apply 1 gallon of dilution per 10 square feet, to provide thorough and continuous coverage of the area being treated. If the fill is washed gravel or other coarse material, it is important that a sufficient amount of dilution be used to reach the soil substrate beneath the coarse fill.***

Termiticides are designed to bond to the soil, that is why when treating gravel fill, the termiticide label requires that the applicator apply one and one half times the required volume.

2. Section R-323.2 of The North Carolina Building Code states: The concentration, rate of application and treatment method of the termiticide shall be consistent with and never less than the termiticide label and applied

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according to the standards of the North Carolina Structural Pest Control Committee of the North Carolina Department of Agriculture.

3. The Structural Pest Control Committee Rules And Regulations state the following:

#### 02 NCAC 34 .0505 SUBTERRANEAN TERMITE PREVENTION/RES BLDGS UNDER CONST

- (a) All treatments performed pursuant to this Rule shall be performed at the label recommended rate and concentration only.
- (b) The following standards and requirements shall apply to the treatment of a building for subterranean termite control during construction if the building has a basement or crawl space:
- (1) Establish a vertical barrier in the soil by trenching or trenching and rodding along inside of the main foundation wall; the entire perimeter of all multiple masonry chimney bases, pillars, pilasters, and piers; and both sides of partition or inner walls with a termiticide from the top of the grade to the top of the footing or to a minimum depth of 30 inches, whichever is less. Where footings are exposed, treatment shall be performed adjacent to the footing but not below the bottom of the footing. Trench shall be no less than six inches in depth or to the bottom of the footing, whichever is less. Where drain tile, french drains, or other foundation drainage systems present a hazard of contamination outside the treatment zone, treatment shall be performed in a manner that will not introduce termiticide into the drainage system.
  - (2) After a building or structure has been completed and the excavation filled and leveled, so that the final grade has been reached along the outside of the main foundation wall, establish a vertical barrier in the soil by trenching or trenching and rodding adjacent to the outside of the main foundation wall with a termiticide from the top of the grade to the top of the footing or to a minimum depth of 30 inches, whichever is less. Where footings are exposed, treatment shall be performed adjacent to the footing and not below the bottom of the footing. Trench shall be no less than six inches in depth or to the bottom of the footing, whichever is less. Where drain tile, french drains, or other foundation drainage systems present a hazard of contamination outside the treatment zone, treatment shall be performed in a manner that will not introduce termiticide into the drainage system.
  - (4) Establish a horizontal termiticide barrier in the soil under the entire surface of floor slabs, such as basements, porches, entrance platforms, garages, carports, breezeways, sunrooms, etc. The treatment shall be performed before slab is poured but after fill material or fill dirt has been spread.
  - (5) Establish a vertical termiticide barrier in the soil around all critical areas, such as expansion and construction joints and plumbing and utility conduits, at their point of penetration of the slab or floor or, for crawl space construction, at the point of contact with the soil.

The above requirements cannot be met when treating a structure with pre-cast concrete foundation walls with a liquid termiticide. In the case of a structure with a conventional footing, there is some deflection of the termiticide before it reaches the outside drain-line.

It should also be noted that application of a pesticide when conditions are favorable for runoff from the target site is also a prohibited act.

#### 02 NCAC 34 .0904 PROHIBITED ACTS

(m) No pesticide shall be applied for the purpose of performing structural pest control when the conditions at the site of application favor drift or runoff from the target site.

The preferred method of treatment is to wait until the final grade has been established and use a stand-alone termite baiting system, approved for use by the Structural Pest Control Committee, or in the case of crawl space and slab construction, a Borate (wood) treatment is possible. There is also a physical barrier that has been approved for use by the Structural Pest Control Committee.

If you have any questions concerning this or other structural pest control regulatory issues, please contact the Structural Pest Control & Pesticides Division.