BELL SYSTEM PRACTICES
Outside Plant Construction and Maintenance

SECTION G21.425.1
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AT&T Co Standard

PRESERVATIVE TREATMENT OF STANDING POLES

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1. GENERAL

1.01 This section describes a method of applying a preservative treatment to standing poles to retard or prevent internal decay in the lower portion of the pole or external decay in the ground line section. This treatment will ordinarily be applied in connection with the routine maintenance inspection of the pole. It should, however, be applied only when specific instructions have been furnished calling for the work.

1.02 This section replaces Issue 1. It has been reissued primarily to describe more fully the conditions under which the treatment should be used and to recommend certain safety precautions which should be taken in handling B Wood Preservative.

1.03 For precautions to be taken when handling B Wood Preservative, see Part 4. ←

2. FIELD OF USE

2.01 An internal and an external treatment are described. (See Parts 5 and 6.) The internal treatment is for use in poles showing evidence of the presence of insects, such as carpenter ants and termites, or having a hollow heart or internal decay. The presence of these conditions can usually be determined by sounding the pole with a hammer and by boring the pole at questionable points with an increment borer. If a pole has advanced internal decay, that is, if the shell thickness is

closely approaching the allowable limit, it is doubtful that the progress of decay can be retarded sufficiently to justify the cost of treatment.

2.02 The external treatment is primarily for use on untreated poles or poles that have previously been brush treated, spray treated or treated by the methods described in this section and where the condition of the pole appears to justify the treatment.

2.03 The external treatment is not ordinarily intended for use on pressure-treated, submersion-treated or open tank-treated poles. In certain cases, however, an external treatment would be beneficial and should be applied, when authorized. These cases are as follows:

(a) The treated poles show evidence of softening of the wood due to decay in the ground line section.

(b) A new and higher ground line is to be established on a pole due to resetting or filling in around a pole, which would have the effect of exposing to soil contact, a portion of the pole from which the preservative has leached out or evaporated, thus reducing the decay resistance of the pole, or

(c) A pole is to be placed or reused which has been held in stock for an unusually long period (three years or longer) so that the original treatment has lost some of its value.

2.04 If a pole has a deep decay pocket, it is doubtful whether the progress of the decay can be sufficiently retarded to justify the cost of treatment.

2.05 The treatment should ordinarily be applied only to those poles which, in the inspector's judgment, have a sufficient amount of sound wood to remain in plant for at least an additional inspection period, allowing for a slowing of the rate of decay resulting from the treatment.

2.06 Do not apply B Wood Preservative to a pole which is close to the shore of a lake or pond or the bank of a stream where there might be seepage or flow of the preservative to the water with the possibility of contaminating the water and killing fish. A distance of 50 feet from the water is considered completely safe for applying a treatment. Do not dispose of empty containers by throwing them in lakes or streams.

2.07 While there has been no indication that cattle or other live stock may be attracted to the preservative or that they might be injured by contact with it, it is nevertheless recommended that the treatment shall not be applied to poles located in or close to barnyards or near wells or other water supply points.

3. TOOLS AND MATERIALS REQUIRED

3.01 In addition to the tools ordinarily required for making a complete ground line inspection of a pole, the following tools are required:

(a) For internal treatment.

(1) A two-gallon hand-sprayer or stirrup pump provided with a sufficient length of neoprene or other petroleum-resistant hose to extend to a point on the pole 4 to 5 feet above the ground line. The end of the hose should be equipped with a 5/16-inch outside diameter, 3/16-inch inside diameter metal tube or nozzle, approximately 6 inches long. This nozzle should be perforated with three pairs of 1/16-inch diameter holes near the open end of the nozzle, and the open end should be partially closed so that the preservative will be delivered in various directions when the nozzle is inserted in the cavity.

(b) For external treatment.

(1) A two-gallon sprinkling can. The can is for use in pouring the preservative against and around the pole and should be modified locally by removing the sprinkler head and flattening the tip of the pouring spout so that it will pour a flat, fan-shaped stream.

(2) A spade, such as a 16-inch Drain Spade. This is for use in forming a trough in the back-filled earth around the pole preparatory to applying the preservative.

3.02 The following materials are required:

(a) B Wood Preservative. This preservative material is a solution of pentachlorophenol in petroleum. The following table gives the capacities and weights of full containers in which the preservative is usually obtainable.

	Capacity in Gallons			
	6*	5	30	55
Weight in Pounds	57	50	300	550

* This consists of six one-gallon cans shipped in a carton.

The amount of the preservative required per pole for external treatment will ordinarily be not more than 1-1/2← gallons, but will depend on the size of the pole and conditions at the location. (See Part 6.) For internal treatment the amount will vary with conditions, but ordinarily will not exceed 1/2 gallon.

(b) 3/8-inch wooden plugs. These plugs are for use in plugging holes made by the increment borer when exploring for evidence of carpenter ant galleries, termite damage, or internal decay.

4. PRECAUTIONS IN HANDLING B WOOD PRESERVATIVE

4.01 The following precautions should be taken in handling B Wood Preservative:

(a) Keep the material away from open flames, inasmuch as the solution contains petroleum and is combustible.

(b) Keep the solution out of the eyes. Wear goggles to prevent spatters from entering the eyes and do not rub the eyes with gloves or clothing that may have been wet with the solution.

(c) Avoid prolonged contact between the solution and the skin. The solution may be washed off the skin with a large quantity of soap and water.

(d) Thoroughly wash the hands before eating if they have been wet with the solution.

(e) Keep the solution away from food.

(f) In case of accidental swallowing of the solution, drink a large quantity of water and induce vomiting. Call a physician.

5. INTERNAL TREATMENT

5.01 At the upper end of a hollow heart condition or at the top of insect galleries, but not higher than 4 feet above the ground line, bore one to three holes 3/8 inch in diameter so as to intersect the galleries or hollow heart. Insert the nozzle described in Paragraph 3.01 (a) deeply enough to intersect the internal cavities and apply one to three pints of the preservative. Plug all holes, using 3/8-inch wooden plugs.

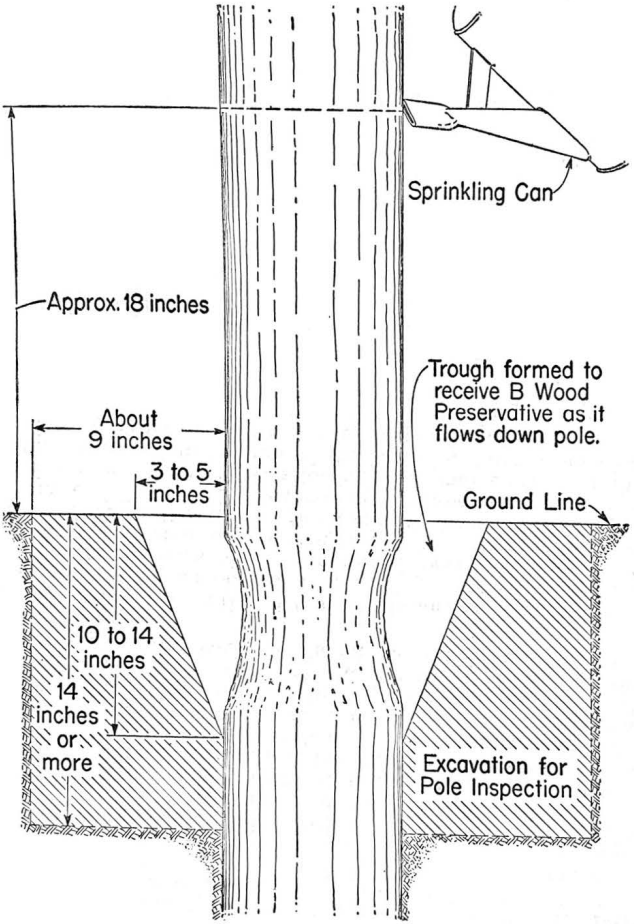
6. EXTERNAL TREATMENT

6.01

(a) Remove general external decay in excess of 1/4-inch thickness by scraping with a shovel blade. Do not use a sharp-edged tool in removing this external decay, because of the possibility that such a tool would also remove sound wood. Remove also as much decayed material from pockets as can readily be done with a shovel blade or a pole prod. An excessive amount of decayed wood left in place tends to restrict the access of the preservative material to the remaining sound wood.

(b) Back-fill loosely the earth which was removed in connection with making the pole inspection, to the level of the ground line. By means of a tool, such as a 16-inch

Drain Spade, form a trough around the pole approximately 10 to 14 inches deep and 3 to 5 inches wide at the ground line level. This can conveniently be done by pushing the spade down along the pole and pressing the earth away from the pole surface without removing any of the loosely back-filled earth as indicated in the following sketch.



(c) Using the modified sprinkling can, pour 1 to 1-1/4 gallons of B Wood Preservative against the pole about 1-1/2 feet above the ground line, allowing the preservative to run down into the trough. Apply the preservative all around the pole, directing the preservative into checks, particularly when there is evidence of termite debris in the checks. Do not pour the preservative so fast that it will overflow the trench. After the preservative has seeped into the soil or has reached a level slightly below the ground line level, close the trough by shoveling additional dirt against the pole and by applying side pressure with the foot against the dirt. In residential localities, the surface of the back-fill should be left in an untreated condition.

(d) In non-residential sections, or in any case where there would be no objection to leaving treated dirt at the top of the back-fill, an additional operation should be included. Open a narrow trough, 1 to 2 inches deep, against the pole in the top of the back-fill. Pour an additional quart of B Wood Preservative against and around the pole above the ground line, allowing it to run down into the untreated soil in the top of the back-fill. After absorption of the preservative, firm the soil against the pole.