

Wooden Pole Treatment Program

Why do wooden utility poles need to be maintained?

Wooden utility poles are a vital part of the electricity delivery system. Just as nature can weather and damage unprotected wooden fences or decks, decay and insects can damage poles that are not properly maintained. A weakened pole could break, endangering the public and causing power interruptions.

Decay is caused by fungi which consume moist wood and can so weaken poles that they must be replaced. Holes caused by carpenter ants and even woodpeckers can speed decay by allowing moisture and fungi to enter and damage poles.

Before they are sold to utilities, poles are treated with wood preservatives that protect against the growth of fungi. Although these materials work for many years, they eventually lose their effectiveness. Studies by Oregon State University and the State University of New York College of Environmental Science and Forestry have convinced us that it is less expensive to apply wood preservatives to poles periodically than to let decay set in and force replacement of the poles.

In fact, poles treated with additional wood preservative last at least 1½ times as long as those not retreated, and it costs between 50 and 100 times more to replace a pole than to treat it. Such treatments therefore save money for our customers.

When and how do we treat poles?

Poles are first treated 15 to 20 years after they are installed and approximately once every 10 years after that.

First, a trench about 1½ feet deep is dug around the pole. The pole is then checked for decay and, if it does not need to be replaced, it is treated with wood preservatives under the supervision of an applicator certified by the New York State Department of Environmental Conservation (DEC).

To be certified, applicators must prove they understand pesticide labeling, handling, disposal, safety, environmental impacts, and applicable laws and regulations.

The applicator uses a long-handled brush to paint a thick, tar-like paste around the base of the pole to protect it from moisture and further decay. The paste is then covered with waterproof paper to keep it in place. Next, six evenly-spaced holes are drilled into the pole in a spiral beginning at ground level and continuing 30 inches up the pole. A wood preservative is injected into the holes, which are then plugged with wooden stoppers. Once inside the pole, the preservative vaporizes and destroys fungi.

If a pole is infested with carpenter ants, an aerosol insecticide is injected into the wood to kill them. The holes used to inject the insecticide are also plugged with wooden stoppers.

Once the pole has been treated, the trench around it is filled in.

Do the materials used to treat poles harm the environment?

We use wood preservatives and insecticides that are approved by and registered with the United State Environmental Protection Agency and DEC. To be registered, the manufacturers must provide scientific evidence that, when handled properly, the materials will work effectively without injuring humans and animals, damaging crops or harming the environment.

Each treatment crew is supervised by a full-time, on-site foreman who is certified by the DEC. As the materials are applied, all instructions are followed scrupulously, and materials are handled cautiously to prevent spills. Because wood preservatives are applied directly to poles, and since waterproof paper and wooden stoppers are used to keep the treatment materials against or inside poles, it is very unlikely that the materials could enter the surrounding environment during applications.

An independently-conducted research study done in response to concerns about the environmental effects of treating poles raised by the Adirondack Park Agency concluded that the materials do not move into the surrounding soil and have no measurable impact on ecosystems when properly applied. Considering the results on this study, as well as the potential damage from the heavy equipment that is used to replace decayed poles and the potential demand for new poles from American forests, treating poles is the wise choice.