



Wood Preservation Expertise

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WOOD UTILITY POLES TREATED WITH PENTACHLOROPHENOL FREQUENTLY ASKED QUESTIONS

What is Pentachlorophenol (“Penta”) and why is it used to treat wood utility poles?

Penta is a chemical compound used as a wood preservative to treat wood utility poles to protect them from fungal decay and wood-destroying pests, including insects and microorganisms. The use of preservatives like Penta helps maintain the structural integrity of a pole and significantly increases the service life of a pole ensuring that fewer trees are harvested for replacement poles. An untreated wood pole has an expected service life of 4.5 years while a Penta treated pole has an expected service life well over 40 years (even more if regularly inspected and remedially treated).

How widespread is the use of Penta treated wood utility poles?

Of the more than 166 million wood utility poles in service in the United States, approximately 55% are Penta treated. Approximately two million new Penta treated poles are manufactured each year. Penta treated wood poles provide reliable support for electrical and other utility services, such as cablevision and telecommunications.

How are utility poles “treated” with Penta?

Penta treated wood poles are initially treated before they are put in service using pressure treatment techniques. The poles are placed in large treatment vessels and as a carrier oil solution consisting of approximately 5.5% Penta is added, pressure is applied forcing the oil borne preservative deep into the sapwood of the pole.

Are Penta treated wood poles supposed to bleed at the base?

Bleeding (or slumping), a term for the migration of the oil-borne preservative towards the base of a utility pole, is common with many oil-borne preservatives and protects the groundline area of the pole from ground contaminants such as moisture, fungus and insects (termites). Regulators in New York and most other jurisdictions do not consider bleeding or slumping a spill or a discharge requiring reporting or remediation.

What is the odor I smell near the recently installed utility poles in my neighborhood? How long will the odor last?

The odor is generally from the carrier oil used during the pressure treatment process, not the small percentage of Penta dissolved in the oil. The odor will dissipate over time, typically well within the first few years of service. The odor may be more noticeable in warmer weather and less so in colder weather.

Are Penta treated utility poles regulated by the United States Environmental Protection Agency (“EPA”)?

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) authorizes EPA to review and register pesticides for specific uses. All pesticides distributed and sold in the United States must be registered by EPA based on scientific data showing that they will not cause unreasonable risks to human health, workers, or the environment when used as intended. Penta is a regulated pesticide registered for use as a wood preservative in utility poles by EPA under FIFRA. EPA issued its most recent Penta Reregistration Eligibility Decision in 2008, finding that, “EPA considered the available information and, after a thorough evaluation of the risks and benefits associated with each use, has determined that the wood preservative uses of Pentachlorophenol will not pose unreasonable risks to humans or the environment.”

Will Penta from utility poles migrate into groundwater?

Tens of thousands of Penta-treated poles are located on Long Island, and the available drinking water data indicates that penta has not been detected. Penta, due to its strong hydroxyl group on the molecule, binds rapidly with soils, including sandy, silica based soils such as those on Long Island, thereby preventing or hindering any potential migration into groundwater.

What should I do if I come into contact with a Penta treated wood pole?

Common sense care should be taken to limit prolonged skin contact with Penta treated poles or the soil at the base of the pole, just as care should be taken to limit exposure to other products containing pesticides like household garden and insect sprays. Avoid prolonged direct contact with Penta treated wood poles and wash hands or other exposed areas thoroughly. (Current US EPA Consumer Information Sheet).

There is a Penta treated wood pole near my home. What should I do if my children play near the pole or in the soil around the base of the pole?

Utility poles are not intended as a child’s play area and as such children should be strongly discouraged from playing with or on utility poles. If children do come into contact with the wood or the soil at the base of the pole, they should wash their hands afterwards as they would normally do after any outdoor activity (US EPA - 1986 Penta - Consumer Information Sheet).

For more information, please go to <http://wooddoc.org/utills/utills.html>