MCWANE POLES PRODUCT KNOWLEDGE WEBINAR SERIES:

Pentachlorophenol

4th Quarter 2020



AGENDA

McWane Poles

What Is Pentachlorophenol?

Why Is It Harmful?

Industry Use

Benefits of McWane Poles

The McWane Way





MCWANE POLES

- Division of McWane, Inc. established 2008
- 50+ employees
- HQ: Coshocton, Ohio
- Manufacturing Locations
 - Coshocton, Ohio
 - Provo, UT
- Over 400 customers across
 42 states in the U.S.

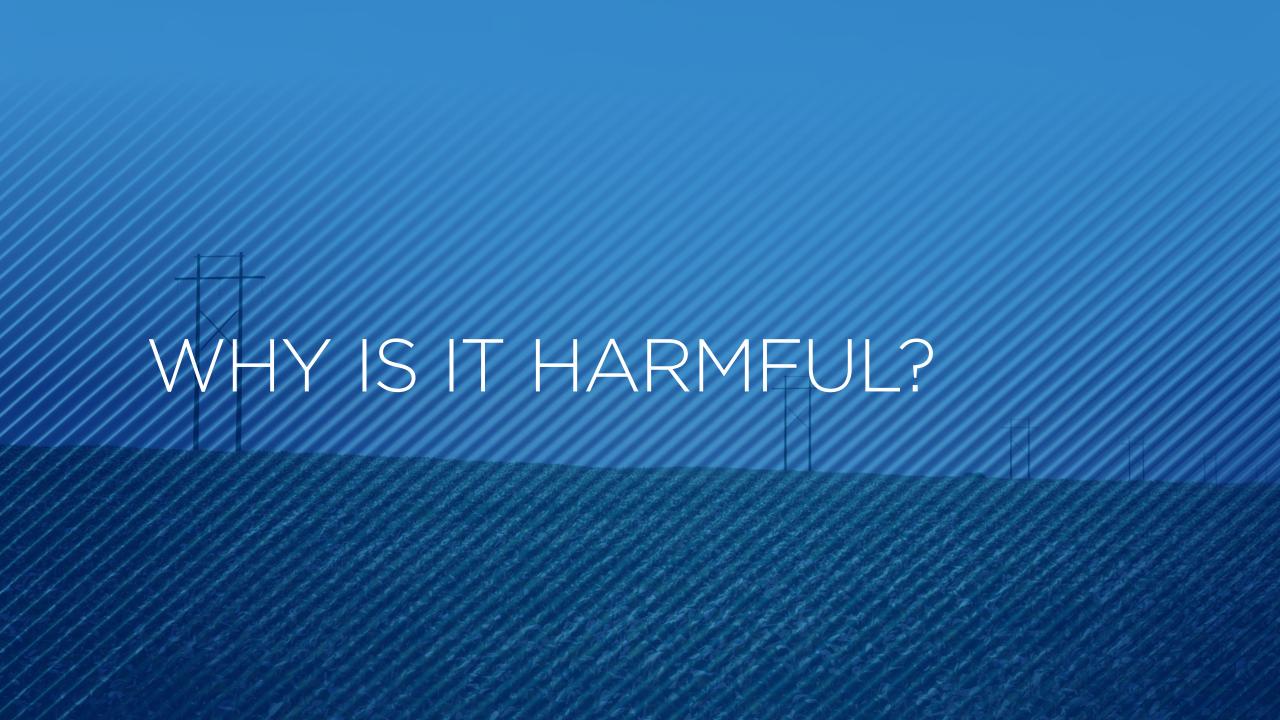


WHAT IS PENTACHLOROPHENOL?

WHAT

- Pentachlorophenol is a manufactured chemical and restricted-use pesticide. It is used in industrial applications as a wood preservative for utility poles, railroad ties, and wharf pilings.
- Toxic by inhalation, ingestion, and skin absorption.





WHY

- In soil, surface water, and air, pentachlorophenol is broken down by microorganisms and sunlight into other compounds, some of which may be harmful to humans.
- It can leach into the ground water and affect public safety.
- The compound can be present in fish or other species used for food, as demonstrated by the ongoing food monitoring program of the Food and Drug Administration (FDA).
- Enters the soil as a result of spills, disposal at hazardous waste sites, and its use as a pesticide.
- Enters surface water and groundwater from factories, wood-treatment facilities, and hazardous waste sites.



WHY (CONTINUED)

- Released into the air by evaporation from treated wood surfaces and factory (chemical manufacturing plants and wood preservation plants) waste disposal.
- The physical and chemical properties of the compound suggest that not much will evaporate into the atmosphere and that most of it will move with water and generally stick to soil particles.
- Jay Feldman, executive director of the environmental group Beyond Pesticides, accuses the US Environmental Protection Agency of dragging its feet on pentachlorophenol, despite alarming cancer findings. For instance, he says, in 1999 the EPA found that children playing near pentachlorophenol-treated utility poles have a 2.2 in 10,000 risk of getting cancer, 200 times the acceptable threshold.



INDUSTRY

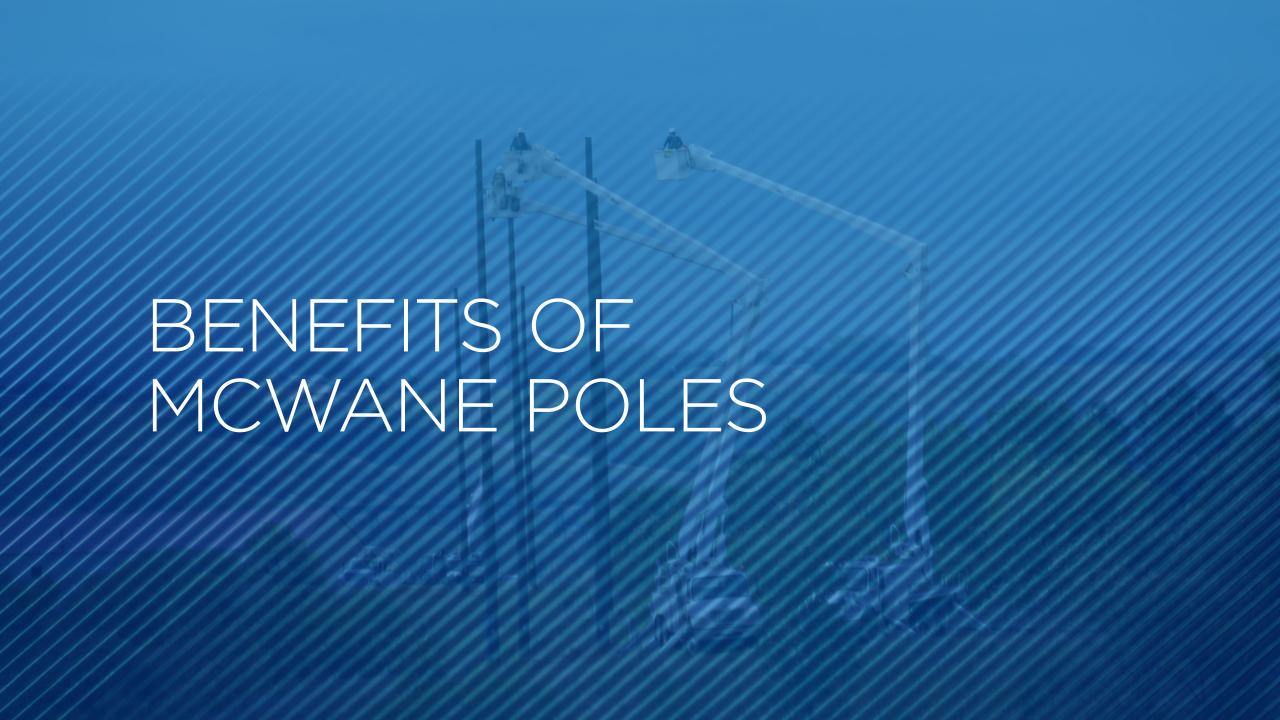
- Wood utility poles require preservatives to fend off termites, fungi, and the elements, and not many chemicals are effective.
- Because pentachlorophenol is cheap and effective, about half of the wood poles in the US are treated with it.
- In 2015, the Stockholm Convention banned pentachlorophenol, noting (among other health concerns), that it is "associated with carcinogenic, renal, and neurological effects."
- The US signed but never ratified the treaty, making it one of the few places on the planet where use of the chemical is still legal.



INDUSTRY (CONTINUED)

- It is banned in most countries, prompting the sole North American producer to announce it will close its plant, in Mexico by the end of 2021.
- With the clock ticking, utility pole makers are looking for safer alternatives.





BENEFITS

- Without a ready supply of pentachlorophenol, utility pole makers will be forced to find replacement preservatives.
- Unlike pentachlorophenol, ductile iron is impermeable to organic contaminants, protecting clean water from environmental spills and the environment from contaminants in wastewater.
- McWane's ceramic-epoxy embedment coating and ductile iron material are certified by the National Sanitation Foundation (NSF) to be safe for use in contact with potable water sources.
- McWane Poles have been used for projects where poles are placed near well water for this reason.





THE MCWANE WAY



Guiding Principles:

- Safety
- Environment
- Leadership
- Accountability
- Excellence
- Trust
- Teamwork
- Communications



QUESTIONS?

For any follow up questions, please contact Mark Murfit, mark.murfitt@mcwanepoles.com.

