

NEW YORK
state department of
HEALTH

Howard A. Zucker, M.D., J.D.
Acting Commissioner of Health

Sue Kelly
Executive Deputy Commissioner

June 6, 2014

Mr. Larry Cantwell
Supervisor
Town of East Hampton
159 Pantigo Road
East Hampton, New York 11937

Dear Mr. Cantwell:

This is in response to your letter of April 28, 2014, in which you expressed your concerns about pentachlorophenol-treated utility poles. You also forwarded an April 22, 2014 letter from Peter Dermody of Dermody Consulting to Helene Forst of the Long Island Businesses for Responsible Energy, Inc., which reported on Dermody Consulting's investigation of recently installed utility poles in the Town of East Hampton. We reviewed Dermody Consulting's investigation at the request of the Suffolk County Department of Health Services (SCDHS). I am enclosing copies of two letters to the SCDHS that summarize our review.

I hope this information is useful to you. If you have any questions, please contact me at 518-402-7800.

Sincerely,



Thomas B. Johnson, Ph.D.
Research Scientist IV
Bureau of Toxic Substance Assessment

Enclosures (2)

cc: N. Graber
K. Gleason
D. Luttinger
M. Hughes
B. Devine
P. Scully, DEC Region 1 Office
A. Shah, DEC Region 1 Office
A. Lamanno, DEC Central Office
J. Harrington, DEC Central Office
J. Tomarken, SCDHS
J. Gremli, SCDHS
A. Juchatz, SCDHS
M. Maddaloni, EPA Region 2
G. Mazza, DPS

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June 6, 2014

James Tomarken, MD, MPH, MBA, MSW
Commissioner
Suffolk County Department of Health Services
3500 Sunrise Highway, Suite 124
PO Box 9006
Great River, New York 11739

Dear Dr. Tomarken:

In response to our May 2, 2014 letter about pentachlorophenol-treated utility poles, you asked if the U.S. Environmental Protection Agency (EPA) considered multiple exposure pathways (i.e., ingestion, dermal contact, and inhalation) in the analysis that led to the EPA finding that the use of pentachlorophenol as a heavy duty wood preservative will not pose unreasonable risks to humans or the environment. In its 2008 Re-registration Eligibility Decision document,¹ EPA evaluated residential post-application risks to adults and children by using the National Health and Nutrition Examination Survey² and the Children's Total Exposure to Persistent Pesticides and Other Persistent Organic Pollutants study³. These are population-based biological monitoring studies in adults and children reporting pentachlorophenol measured in urine. Urinary levels would reflect people's exposure to pentachlorophenol from all possible exposure pathways and all possible sources of pentachlorophenol.

You also indicated that some residents have asked questions about the risk for short-term health effects from exposure to soil next to the utility poles and from direct contact with the poles. Our May 2nd letter indicated that people would be unlikely to contact soil near the poles with sufficient duration and frequency to result in a significant risk for adverse health effects. To further evaluate exposure to this soil, we examined the potential for acute (short-term) health effects in a child who might sit at the base of a pole and eat some of the soil. Even at the highest pentachlorophenol soil concentration reported in the April 22, 2014 Dermody Consulting letter (250 milligrams per kilogram of soil), the exposures that might result from this kind of activity are well below exposure levels that might cause health effects.

¹ US EPA (US Environmental Protection Agency). 2008. Re-registration Eligibility Decision for Pentachlorophenol. Prevention, pesticides and Toxic Substances (7510P) EPA 739-R-08-008. September 25, 2008. Washington, D.C. Accessed (May 1, 2014) on-line at http://www.epa.gov/oppsrrd1/REDs/pentachlorophenol_red.pdf.

² NHANES (National Health and Nutrition Surveys). 2014. Surveys and Data Collection Systems. Accessed (May 5, 2014) on-line at <http://www.cdc.gov/nchs/nhanes.htm>.

³ Wilson et al. 2007. An observational study of the potential exposures of preschool children to pentachlorophenol, bisphenol-A, and nonylphenol at home and daycare. Environmental Research 103 (2007) 9-20. Accessed (May 5, 2014) on-line at <http://www.sciencedirect.com/science/article/pii/S0013935106000788>.

Regarding the health risks to people who might, for example, put their hands on the utility poles, there is ample scientific information to indicate that direct contact with pentachlorophenol can irritate the skin and eyes⁴. Therefore, it is possible that people who have direct skin contact with a utility pole treated with a pentachlorophenol-containing product could experience skin irritation. However, we would not expect frequent, routine or long duration skin contact with utility poles.

I hope this additional information is useful. Please contact me at 518-402-7800 if you have any further questions.

Sincerely,



Thomas B. Johnson, Ph.D.
Research Scientist IV
Bureau of Toxic Substance Assessment

cc: N. Graber
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M. Maddaloni, EPA Region 2
G. Mazza, DPS

⁴ ATSDR (Agency for Toxic Substances and Disease Registry). 2001. Toxicological Profile for Pentachlorophenol. Accessed (May 6, 2014) on-line at <http://www.atsdr.cdc.gov/toxprofiles/index.asp>.

NEW YORK
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Nirav R. Shah, M.D., M.P.H.
Commissioner

Sue Kelly
Executive Deputy Commissioner

May 2, 2014

James Tomarken, MD, MPH, MBA, MSW
Commissioner
Suffolk County Department of Health Services
3500 Sunrise Highway, Suite 124
PO Box 9006
Great River, New York 11739

Dear Dr. Tomarken:

At the request of your Department, we reviewed an April 22, 2014 letter from Peter Dermody of Dermody Consulting to Helene Forst of Long Island Businesses for Responsible Energy, Inc. reporting on Dermody Consulting's investigation of recently installed utility poles in the Town of East Hampton. The table and attachments described in the letter were not included with the letter, and we understand that your Department did not receive those materials. The letter describes the inspection of several poles and the results of soil samples taken approximately six inches from the edge of three of the poles. The letter indicates that the soil near the poles contained elevated concentrations of pentachlorophenol.

Pentachlorophenol is a general biocide (broad range pesticide) that had previously been used extensively by agriculture and other industries. Currently, the only use of pentachlorophenol that is registered (allowed) by the U.S. Environmental Protection Agency (EPA) is as a "heavy-duty" wood preservative (e.g., to maintain the structural integrity of utility poles).¹

In its 2008 Re-registration Eligibility Decision document², EPA conducted an extensive review of the toxicity of pentachlorophenol and the potential health risks associated with its use as a "heavy duty" wood preservative, which included consideration of post-application adult and child exposures. Overall, the EPA determined that the uses of pentachlorophenol as a "heavy-duty" wood preservative will not pose unreasonable risks to humans or the environment. The agency also noted that "eliminating these uses could result in reliance on products with greater safety risks, increased adverse effects on the environment, reduced effectiveness, and higher costs that could be passed on to the general public."

¹ The term "heavy duty" wood preservative is used to differentiate wood preservatives applied using specialized high pressure treatment cylinders from those applied using non-specialized methods (e.g., brush, dip).

² US EPA (US Environmental Protection Agency). 2008. Re-registration Eligibility Decision for Pentachlorophenol. Prevention, pesticides and Toxic Substances (7510P) EPA 739-R-08-008. September 25, 2008. Washington, D.C. Accessed (May 1, 2014) on-line at http://www.epa.gov/oppsrd1/REDs/pentachlorophenol_red.pdf.

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The soil sampling results provided in the letter are consistent with those of other studies of soil near utility poles treated with pentachlorophenol.³ These studies show that a certain amount of pentachlorophenol can be lost from the poles as they age or become weathered. This loss increases the pentachlorophenol concentrations in soil near the pole, typically within inches of the pole itself.

The risk for adverse health effects from exposure to any chemical in soil, including pentachlorophenol, does not depend solely on the concentration of the chemical in the soil, but also on how often and how long people might come in contact with the soil. Since the elevated soil concentrations of pentachlorophenol are localized in areas near the poles, people are unlikely to contact substantial amounts of soil with sufficient duration and frequency to result in a significant risk for adverse health effects.

Mr. Dermody's letter compares the sampling results to 6 NYCRR Part 375 Soil Cleanup Objectives (SCOs) for unrestricted land use. The applicability of the SCOs in this instance would be best addressed by the Department of Environmental Conservation (DEC). Questions about the SCOs can be directed to James Harrington of the DEC Division of Environmental Remediation (518-402-9764).

The letter also makes reference to concerns about possible misapplication of pentachlorophenol in regard to the treated utility poles. We have been in contact with pesticide management staff in the DEC's Central Office, and we understand that Region 1 DEC office (631-444-0340) staff are investigating this issue.

We understand that there have been complaints of odors in the vicinity of the utility poles. Whether or not someone experiences health effects from smelling odors depends upon several factors, including the type of chemical, how concentrated the chemical is in the air, how long the exposure continues, and whether or not the person has any particular sensitivities. Health symptoms from odor exposures usually go away quickly when the odors stop. For additional information on odors, please refer to the Department of Health's fact sheet on Odors and Health.⁴

I hope you find this information helpful. If you have any further questions, please contact me at 518-402-7800.

Sincerely,



Thomas B. Johnson, Ph.D.
Research Scientist IV
Bureau of Toxic Substance Assessment

cc: N. Graber

³ EPRI (Electric Power Research Institute). 1995. Pentachlorophenol (PCP) in soils adjacent to in-service utility poles in New York State. Document EPRI TR-104893. Final Report/March 1995. Accessed (May 1, 2014) on-line at <http://www.epri.com/abstracts/Pages/ProductAbstract.aspx?ProductId=TR-104893>.

⁴ The New York State Department of Health fact sheet on Odor and Health may be accessed on line at <http://www.health.ny.gov/publications/6500/>.

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