Hexachlorocyclopentadiene (C₅Cl₆)

What is Hexachlorocyclopentadiene?

Hexachlorocyclopentadiene (HCCPD) is a manufactured chemical that does not occur naturally. It is a light, lemon-yellow liquid that has a sharp musty odor. It easily evaporates into the air; the vapor looks like a blue haze. HCCPD is used in the manufacture of certain pesticides. Most of the HCCPD in the environment results from releases during production and disposal. It is also used to make flame retardants, resins that will not burn, shock-proof plastics, esters, ketones, fluorocarbons, and dyes.

It is broken down quickly by sunlight and reactions with other chemicals in the air. HCCPD does not dissolve readily in water but will evaporate from the surface. HCCPD that gets into soil binds to decaying plant and animal matter. If the soil is sandy, it can move through the sand to reach groundwater. Small amounts can accumulate in fish.

Does Hexachlorocyclopentadiene have any additional names?

HCCPD, Hexachloro-1,3-cyclopentadiene, Perchlorocyclopentadiene

What are the known health effects?

Some people who drink water containing HCCPD well in excess of the MCL over many years could experience problems with their kidneys or stomach.

How does exposure occur?

Exposure may occur when you are working with or producing HCCPD. Exposure may also occur by applying pesticides containing it, by contact with contaminated soil, and by eating or drinking foods contaminated with HCCPD, but only a small amount will enter your blood stream.

Is this contaminant regulated?

Yes, and water supplied to Mount Laurel MUA customers is in compliance with USEPA and NJDEP requirements. The maximum concentration of Hexachlorocyclopentadiene permitted in drinking water is 50 ppb; water supplied by the MLTMUA system has not reported any detections of Hexachlorocyclopentadiene.

How can I reduce exposure?

Hexachlorocyclopentadiene in drinking water can be removed at point of use by granular activated carbon filtration.

Additional information regarding Hexachlorocyclopentadiene, including the information referenced, can be found at:

<u>https://www.atsdr.cdc.gov/toxfaqs/tfacts112.pdf</u> https://www.epa.gov/sites/production/files/2016-09/documents/hexachlorocyclopentadiene.pdf