EPA Reviews 1,1-DCE

In August 2002, EPA released their reassessment of potential human health effects from exposure to 1,1-DCE. EPA concluded that evidence that breathing 1,1-DCE could cause cancer in humans was too weak to warrant any quantitative estimate. The only guideline for concentrations in air that EPA proposed to prevent health effects was 200 micrograms per cubic meter of air (µg/m³), which is more than 400 times higher than the current state action level of 0.49 µg/m³. (The 0.49 µg/m³ is based on EPA’s prior standard, which calculated a mathematical risk of 1 additional cancer case in 100,000 people). CDPHE is considering the new information presented by EPA in the IRIS database.

To date, none of the homes near the Redfield site have tested above the new EPA guidelines. The highest level of 1,1-DCE found in indoor air in the neighborhoods is 131 µg/m³.

The reevaluation of 1,1-DCE came as part of EPA’s ongoing review of the Integrated Risk Information System known as IRIS. IRIS is an electronic database containing information on human health effects that may result from exposure to various chemicals in the environment. The information in IRIS is intended for use in protecting public health through risk assessment and risk management, and undergoes scientific peer review both inside and outside the EPA. The IRIS file for 1,1-DCE can be found at http://www.epa.gov/iris/subst/0039.htm.