State of Colorado Publishes Interim Indoor Air Policy for TCE

In August 2004, the Colorado Department of Public Health and Environment (CDPHE) adopted a new interim policy that revises interim screening and remediation levels for trichloroethylene (TCE) in indoor air.

Under the new policy, if TCE levels range from .8 to 1.6 micrograms per cubic meter of air (µg/m$^3$), CDPHE will require further study to determine the sources of contamination (i.e., background such as household products versus groundwater) and whether remediation will be required. The previous residential risk levels for TCE in indoor air used by CDPHE were 70-140 µg/m$^3$. These changes are based on CDPHE’s review of current toxicological information and risk management processes.

TCE is one of the chemicals Brown Group Retail, Inc., has been monitoring in the indoor air of homes within a designated test area for the Redfield site since 1998. TCE is present in the groundwater under certain areas of the Redfield site and surrounding facilities, although it is generally found in lower concentrations than another similar chemical, 1,1-dichloroethene (DCE).

TCE was used as an industrial cleaner and also is found in many common household products, including typewriter-correction fluid, paint removers, paint strippers, nail polish, gun-cleaning fluid, electronic cleaners, rust remover, adhesive glues, spot removers and other types of fluids. These products can emit TCE into the air during their use and even through their containers during storage of the products in the home. Because TCE is prevalent in many household products, levels found in homes above CDPHE’s new range of .8 to 1.6 (µg/m$^3$) may be attributable to household sources.

If a home without an indoor air system tests above 1.6 µg/m$^3$ for TCE, but the groundwater concentrations of TCE and other evidence indicate that groundwater is not the source, CDPHE will not require the home to be ventilated. The homeowner will be advised to contact CDPHE for a list of other potential sources of the chemical and ways to reduce exposure in the home.

If a home without an indoor air system tests above 1.6 µg/m$^3$ for TCE and the source is attributed to the groundwater, Brown Retail will offer to install a ventilation system. Homeowners will be contacted directly by EnviroGroup, Brown Retail’s environmental contractor, to discuss test results. An analysis of homes tested in the area shows that only a very small number of homes may require ventilation systems for TCE under this new interim policy.

Homes that currently have an indoor air system should be protected from TCE in the indoor air, as long as the TCE is coming from the groundwater. If, however, a ventilated home tests above 1.6 µg/m$^3$, the results will be reviewed by Brown Group’s environmental contractor, EnviroGroup, and CDPHE to determine the source.
If the TCE is not attributable to the groundwater, the homeowner will be advised to contact CDPHE for advice on reducing exposure from household sources. If the source of TCE is determined to be groundwater, EnviroGroup will work with a contractor to modify the home’s existing ventilation system.

CDPHE’s interim TCE policy should not expand the general boundaries of the indoor air test area associated with the Redfield site.

With respect to its new policy, CDPHE states: “It is important to emphasize the utilization of these levels is an interim decision based on the uncertainties surrounding the evaluation of TCE, and does not set a precedent for other remedial actions now or in the future.”

For more information, contact Lisa Sigler, community relations representative for Brown Retail at 303-778-8355, or Marion Galant, community involvement manager for CDPHE, at 303-692-3304.