

# Health Assessment, Consultation and Education Program (HACE)

# CTS/Mills Gap Rd. Site Public Health Assessment Findings

January 21, 2011

# **Background**

The CTS/ Mills Gap Road Site is located east of Asheville in Skyland, Buncombe County, North Carolina. The CTS plant manufactured electronic components on the site from 1952 to 1986. The original 54-acre CTS property was sold and redeveloped, leaving a fenced 9-acre site where manufacturing had occurred. The area currently surrounding the 9-acre site is a mix of residential and industrial properties.

In July 1999, the chemical trichloroethylene (TCE) was found in a drinking water well near the site. At that time, residents in the area were given bottled water and then connected to municipal drinking water.

Currently, the N.C. Department of Environment and Natural Resources (NC DENR) and the U.S. Environmental Protection Agency (EPA) are conducting investigative and cleanup activities at the site and are actively monitoring contaminant levels in the surrounding area.

## **Purpose of the Public Health Assessment**

The N.C. Division of Public Health (NC DPH) was asked to conduct a comprehensive evaluation of the potential public health hazards related to contact with the contamination identified at the CTS site. This Public Health Assessment includes samples collected until August 2008.

How was the Health Assessment conducted? NC DPH looked at all the environmental data collected by NC DENR and EPA in association with this site, including data collected beyond the property.

For a person to become sick from chemicals in the environment, one has to come in contact with the chemical. Therefore, we evaluated the different ways in which people could come in contact with toxic chemicals from the CTS site.

The data evaluated included chemical concentrations in outdoor air, soil, surface water; contaminant gases moving thru the sub-surface, groundwater and private wells that could be used for drinking, showering and other household activities. NC DPH also evaluated cancer rates within a 1-mile radius from the site.

### Results

- Concentrations of trichloroethylene (TCE) observed in private wells in 1999 may have been high enough to cause adverse health effects. There is not enough information about the exposures (how long people may have been drinking the contaminated water, and the concentration of TCE over the period of contamination) to know for certain if adverse health effects are to be expected. The wells were closed in 1999.
- Private well data collected from 1999
  through January 2008 does not indicate
  the potential for adverse health effects,
  because either people are no longer
  using the private wells or the levels in the
  wells that are still in use are too low to
  cause harm.
- Monitoring wells showed potentially harmful levels of chemicals in the groundwater, but there is no indication that people were in contact with the water. These wells are not used for

drinking, showering or any other household activity.

- The chemical concentrations found in the outdoor air, soil, and crawl space air were too low to cause harm.
- The evaluation of cancer rates in a 1mile radius from the site showed that the rates are not higher than what would normally be expected.

# Toxic chemicals associated with the CTS site and potential health effects

Trichloroethylene (TCE) is of special interest because of the particular manufacturing activities that took place at the site, the environmental sampling results, and the potential health effects.

Breathing TCE for long periods may cause nerve, kidney, and liver damage. Drinking small amounts for long periods may cause liver and kidney damage, impaired immune system function, and impaired fetal development among pregnant women, although the extent of some of these effects is not yet clear. Drinking large amounts for long periods may also cause impaired heart function. Skin contact with TCE may cause skin rashes.

#### **NC DPH's recommendations**

- Identify and test any additional private wells in the likely path of the contamination. Provide alternative drinking water sources if chemical contaminants exceed health or regulatory levels. Include lead and chromium in the water analytical tests.
- Continue to monitor the groundwater coming off the site for chemical contamination and potential human contact with it. Prevent human contact with contaminated groundwater.
- Continue to limit the access, especially of children, to springs and streams near the east side of the property as long as chemical contaminants are at harmful levels.
- People suspected to have been exposed to TCE in their private well water, identified in 1999, should undergo complete medical evaluations. Let your healthcare provider know about the circumstances of the TCE contact.

# Contact:

## **Buncombe County Health Department:**

Information and Assistance about Well Testing (828) 250-5036 Questions about the Health Assessment (828) 250-5214

**NC HACE Program**: (919) 707-5900

### **Additional Information**

N.C. Public Health: Health Assessment, Consultation and Education Program www.epi.state.nc.us/epi/oee/hace.html



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