



GMH Electronics NPL Site Health Consultation

January 24, 2011



Background

GMH Electronics NPL Site is located at 1800 Virgilina Rd. near Roxboro, Person County. The site consists of an 8,000 square foot brick structure on a 0.455 acre parcel of land. The building is currently occupied by an automotive repair shop. From 1972 to 2004 the site manufactured electronic components. Chlorinated solvents were improperly disposed of in the on-site septic system. The groundwater near the site is contaminated with chlorinated solvents. It is also contaminated with gasoline from leaking underground storage tanks that were located at the site and at a former gas station at the intersection across from the site.

In 2007 the Environmental Protection Agency (EPA) and the Department of Environment and Natural Resources

(DENR) sampled drinking water at 30 homes. Bottled water or carbon filtration units were provided to residents with contaminant levels above EPA's maximum contaminant level (MCL).

Additional sampling of groundwater, surface water, and soil gas was performed in February 2008. The Health Assessment, Consultation and Education Program of the Division of Public Health evaluated the data available prior to June 2008 in a health consultation that was released in September 2008.

Additional sampling was conducted in October and November 2008. Results of the sampling showed contamination in 45 of a total of 89 wells. At that time the filters were replaced on the filtration systems maintained by EPA. In September 2009 the site was added to the EPA's National Priorities List.

Approximately 50 homes located within a 500-foot buffer area of the contaminated ground water were offered a connection to the public water supply in 2010.

Purpose of the Health Consultation

To evaluate the private well drinking water data that was collected in October and November 2008 and determine if the contaminated groundwater has the potential to harm people's health.



How was the Health Consultation conducted?

In our evaluations we use highly health protective estimations of exposures. These estimates are then compared to values well below levels known or anticipated to harm people's health.

Conclusion

- There is a low risk of developing cancer from drinking or showering with the contaminated water.
- Other health effects are not expected from drinking or showering with the contaminated water.

Basis for the Conclusion

- Based on long term exposure estimates, well water in 10 homes was contaminated at levels that could result in a low to very low risk of developing cancer. However, those homes were using bottled water or water filters for some of the time period evaluated. It is not known for how long

the water was contaminated or the concentration of contaminants before people stopped using the water or the filters were installed.

- Forty-four homes had no contamination.
- Twenty-eight homes had contaminants detected but at levels below the U.S. EPA's maximum contaminant level. The chemical levels are not expected to cause harm.

Recommendations by the N.C. Division of Public Health

- The contaminated groundwater movement should be monitored to ensure drinking water wells outside the buffer zone do not become contaminated.
- New wells should not be allowed in the contaminated area or buffer zone.
- Updates should be given to the surrounding community of the ongoing remediation work.

Contact:

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Additional Information

Full reports are available under Person County at www.epi.state.nc.us/epi/oeo/hace/ncmap/CountyInfo.html#Person



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