

GMH Electronics Site

Roxboro, North Carolina



Site Description

The GMH Electronics Site is located at the intersection of Halifax Road and Virgilina Road, approximately 0.75 miles northeast of Roxboro, North Carolina. The sources of contamination associated with the site likely originated from three areas, including the former operations area at the GMH property, a former gasoline station on the GMH property and a former gasoline station across the intersection. The site includes a contaminated groundwater plume that extends beyond these two properties. Residential properties are located on the northeast and southwest corners of the intersection, as well as on all sides of the site. EPA placed the site on the Superfund program's National Priorities List (NPL) in 2009 because of contaminated groundwater resulting from facility operations.

Current Site Status and Cleanup Actions to Date

- A citizen complaint in November 2007, prompted the Person County Health Department to sample the area surrounding the former GMH facility. The results of this sampling effort indicated volatile organic compound (VOC) contamination in several of the private drinking water wells near the site above EPA's Maximum Contaminant Levels (MCLs). Based on these results, EPA provided emergency drinking water to residents with contaminated wells.
- In December 2007, EPA expanded the scope of sampling to include more than 30 residential wells surrounding the former gas station and the GMH Electronics property. Based on the sampling results, 17 homes were supplied bottled water, and five homes had carbon filters installed on their private drinking water wells. The NC underground storage tank program installed two additional filter systems at two residences adjacent to the site.
- In February 2008 representatives of the NC Department of Environment and Natural Resources (DENR), EPA and Person County conducted a sampling event at the site, which included surface water sampling, groundwater sampling and soil gas sampling. The purposes of this investigation were to determine the private drinking water wells' contamination source, to determine if vapor intrusion into residences posed a risk, and to obtain the necessary data to determine whether the site was eligible for the NPL. Soil and soil gas sampling indicated that although contaminants were present at significant levels, they did not pose an immediate threat to human health through vapor intrusion. An additional soil gas investigation was completed in January 2013 that further supported these findings.
- From 2008 through 2009, EPA conducted a focused remedial investigation in which 89 residential wells were sampled. VOC contamination was detected above MCLs in several wells. As a result, EPA signed an interim Record of Decision (ROD) in April 2009. The interim remedy for the site included the extension of the existing municipal waterline, connection of the affected residences and businesses to the waterline, and the abandonment, locking and/or disconnecting of private drinking water wells. This interim remedy's objective was to prevent human exposure to contaminated drinking water above acceptable risk levels. By 2010, the interim remedy was completed and 45 homes were connected to the City of Roxboro public water system.
- In 2011, EPA started another remedial investigation to further characterize the groundwater plume, identify source areas, further assess the vapor intrusion pathway and assess soil contamination. This information was used to prepare a feasibility study that evaluated the potential remedies to eliminate, reduce or control any remaining risks to human health and the environment posed by the site's contaminated soil and groundwater.
- In September 2014, EPA issued a second interim ROD to mitigate site risks and treat source areas, remediate high concentration areas of both the solvent, petroleum plume and 1,4-dioxane plume.
- EPA determined all unacceptable human exposure pathways have been eliminated, and therefore, under current conditions, human exposure is under control site wide.

Unfunded Action

The FY 2014 unfunded remedial action for this site consisted of treatment of source areas and remediation of high concentration areas of both the solvent, petroleum plume and 1,4-dioxane plume.

Current Funding Status

To date, EPA has spent approximately \$2,158,550.00 on construction work at the site.

For more information on this site, please read the GMH Electronics Site Profile Page at

<http://www.epa.gov/superfund/gmh-electronics-halifax-road>.