

U.S. Environmental Protection Agency

CTS of Asheville, Inc.

Superfund Site

Asheville, N.C.



Fact Sheet

November 2017

Public Meeting

Thursday, November 30, 2017

6:30 to 8:30 p.m.

Skyland Fire Department

9 Miller Road in
Asheville

Cleanup to begin at CTS Site!

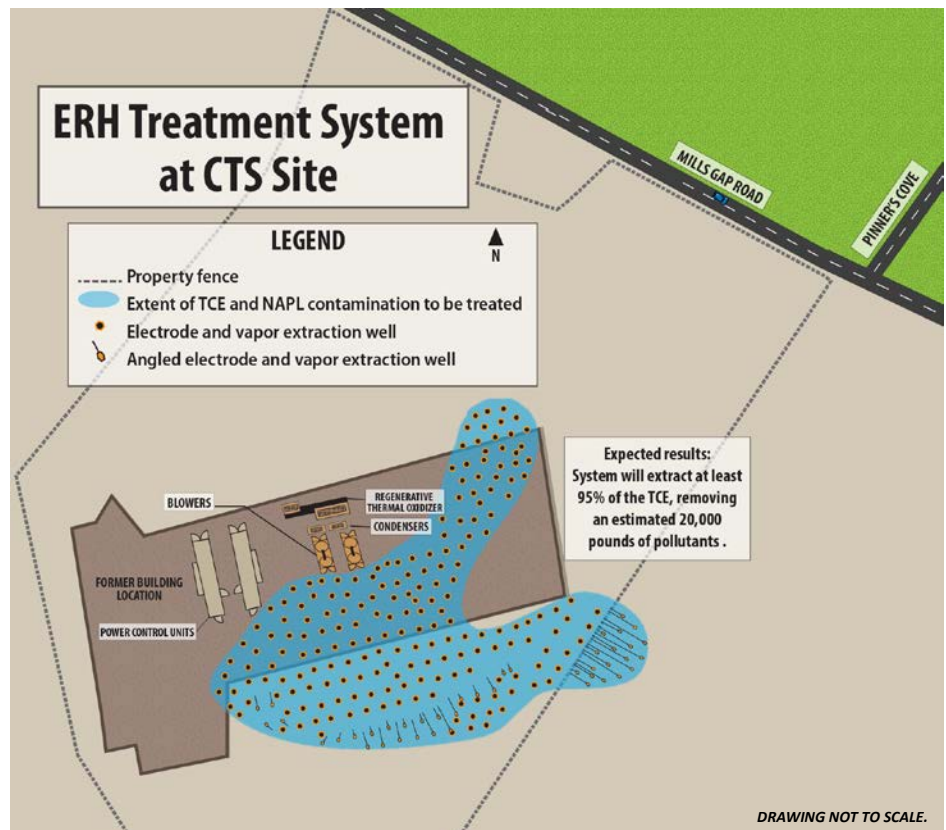
Work is underway at the CTS of Asheville, Inc. Superfund Site (Site) to install the treatment system that will clean up contaminants in the groundwater and soil beneath the former CTS plant. Site preparations began in October, and drilling will begin in December. Construction of the treatment system is expected to be completed in May and will operate through the fall of 2018.

Extensive monitoring will be conducted while the system is operating to protect on-site workers and the surrounding community. More information about the treatment system follows. EPA will also host a public meeting about the treatment system and answer questions.

Treatment system overview

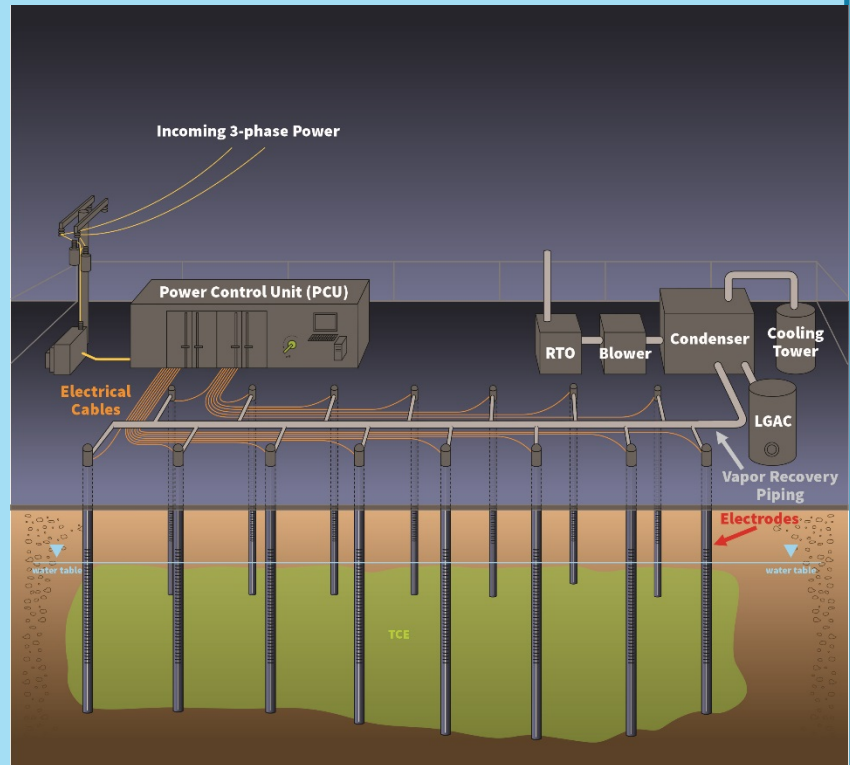
Electrical Resistance Heating (ERH) will be used to treat contaminants in the 1.2-acre source area beneath the former CTS plant at 235 Mills Gap Road. These contaminants include trichloroethene (TCE) and light nonaqueous phase liquid (LNAPL) from weathered fuel oil. CTS has contracted with TRS Group, Inc. to install and operate the treatment system, with oversight from EPA.

ERH is a technology that heats the ground to extract and treat hazardous substances. Electricity runs through electrodes, heating the soil and groundwater to vaporize the contaminants. The vapors are captured and removed through extraction wells. Contaminated vapor is then treated above ground before being discharged to the air.



Steps of the treatment system

1. Electricity starts flowing to the underground electrodes, heating the soil and groundwater.
2. The TCE begins to turn into vapor.
3. The vacuum extraction system sucks the vapors out of the ground.
4. The heated, moist vapor is cooled, condensing back into liquid and air, and separated.
5. TCE in the separated air is routed through the regenerative thermal oxidizer (RTO) to burn off and destroy it. A scrubber removes acid produced when TCE is burned off, and clean air is discharged to the atmosphere.
6. The condensed liquid is routed to an oil/water separator.
7. LNAPL (weathered fuel oil) is collected in a separate tank that will be sent off-site to an approved hazardous waste disposal facility.
8. The water stream is pumped through a liquid granulated carbon system (LGAC) to clean it before being discharged to the municipal sewer.



Treatment system design and performance

The ERH system will require 229 electrodes and vapor recovery wells that will be spaced 17 feet apart throughout the treatment area. The electrodes will be installed to the top of bedrock, approximately 30 to 50 feet below ground. Electrodes will heat the subsurface to the TCE boiling point of 87 degrees Celsius. A total of 8,250,000 kilowatt hours of electrical energy will be applied over an estimated 120 days. The system is expected to extract at least 95 percent of the TCE from approximately 47,250 cubic yards of material, removing an estimated 20,000 pounds of pollutants. When sampling confirms the remedial goal has been achieved, the system will be turned off and removed.

Monitoring and information for the surrounding community

Dust control measures will be implemented during installation of the treatment system. The treatment system will operate 24/7, except during confirmation sampling. During treatment, the CTS Site will continue to not be accessible to the public. There will be 24-hour site security, including personnel, lights and cameras, while the system is operating. The streets and any area outside of the treatment system will be safe to use as normal. People walking down the street will not notice a change in temperature.

Continuous, real-time ambient air monitoring will be conducted during treatment at four fence line locations, and will be set to alarm if exceedances of action levels are detected. Soil temperature will be monitored at 18 points within the treatment area to evaluate the performance of the electrodes. The performance of the ERH system, vapor treatment, and water treatment systems will include daily, weekly and monthly samples collected and analyzed using field instruments and by off-site laboratories.

Next Steps

The EPA issued an Interim Action Record of Decision on February 26, 2016, specifying the interim cleanup remedy.

The major components of the selected interim remedy include ERH described in this fact sheet to treat the 1.2-acre source area, and In-Situ Chemical Oxidation (ISCO) to treat a 1.9-acre area north of the ERH treatment area. This northern area has a dissolved-phase TCE plume present in groundwater. ISCO involves injection of chemicals into the ground. The chemicals oxidize and break down the contaminants into harmless by products like carbon dioxide and water. A treatability study for the ISCO portion of the cleanup is scheduled to begin January 2018.

First of two ERH power control units being delivered to the Site

A final site-wide cleanup decision is not expected for several years. EPA and the potentially responsible parties will complete the Remedial Investigation/ Feasibility Study to evaluate options for the final remedy. EPA will then propose the plan to the public for input before selecting the final remedy. It is important to gauge the success of the interim remedy before selecting the final remedy.



3

[www.epa.gov/superfund/
cts-millsgap](http://www.epa.gov/superfund/cts-millsgap)

FOR MORE INFORMATION

EPA Remedial Project Manager

Craig Zeller (404) 562-8827
zeller.craig@epa.gov

EPA Community Involvement Coordinator

Angela Miller (404) 562-8132
miller.angela@epa.gov

NC Department of Environmental Quality

Beth Hartzell (919) 707-8335
beth.hartzell@ncdenr.gov

NC Department of Health and Human Services

(919) 707-5900
nchace@dhhs.nc.gov