COMMUNITY UPDATE INFORMATION SHEET
CTS of Asheville, Inc. Superfund Site
Asheville, Buncombe County, North Carolina

November 4, 2013

EPA is committed to keeping the community informed about activities related to the CTS of Asheville, Inc. Superfund Site. Community Update Information Sheets will be published approximately monthly and will summarize the present status, future activities, and community involvement opportunities. Historical information has been presented in previous editions.

The CTS of Asheville, Inc. Superfund Site (CTS Site) is approximately nine acres located on Mills Gap Road in Asheville, Buncombe County, North Carolina, and also includes the areal extent of contamination. It is in an area known as Skyland, which is approximately 5 miles south of Asheville. The former facility is bordered by Mills Gap Road to the north, and residences and undeveloped land to the east, south, and west. The primary contaminant associated with the CTS Site is trichloroethene (TCE).

NAPL INVESTIGATION UNDERWAY

Activities associated with the Non-Aqueous Phase Liquids (NAPL) Investigation began on **September 23, 2013**. The work includes a multi-step process to better understand how deep and wide the highest concentrated contamination exists on and adjacent to the former plant property.

Tasks 1 and 2 involved measuring depth to water in the monitoring wells, gauging the wells and sampling if NAPL was found. As reported in the last Community Update, NAPL was found in two of the monitoring wells. Analytical results are currently going through quality assurance/quality control review.

Tasks 3 and 5 – Conduct MIP and HPT Investigation

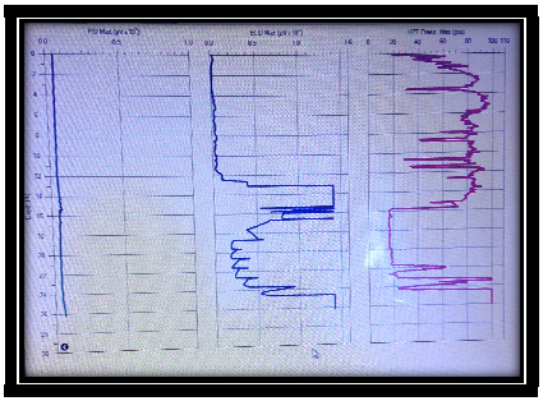
Membrane Interface Hydraulic Profiling Tool (MiHpt)

Tasks 3 and 5 are still underway. These tasks were combined due to a new Geoprobe® tool that combines these two functions into a single direct push tool called a Membrane Interface Hydraulic Profiling tool (MiHpt). More information about MiHpt can be found at: http://geoprobe.com/mihpt.

September 24th, Zebra Environmental began boring through the soil with a Geoprobe®, which is a track mounted piece of equipment that pushes sampling rods through the soil. Attached to the tip of the first rod for these tasks is a detecting device called a MiHpt. Above is a picture of the MiHpt lying on top of connecting rods. As the probe travels through the soil it detects volatile compounds, measures soil electrical conductivity and injection pressure. Computer software estimates hydraulic conductivity and water table elevation, as well as prepares graphical outputs of the log data.

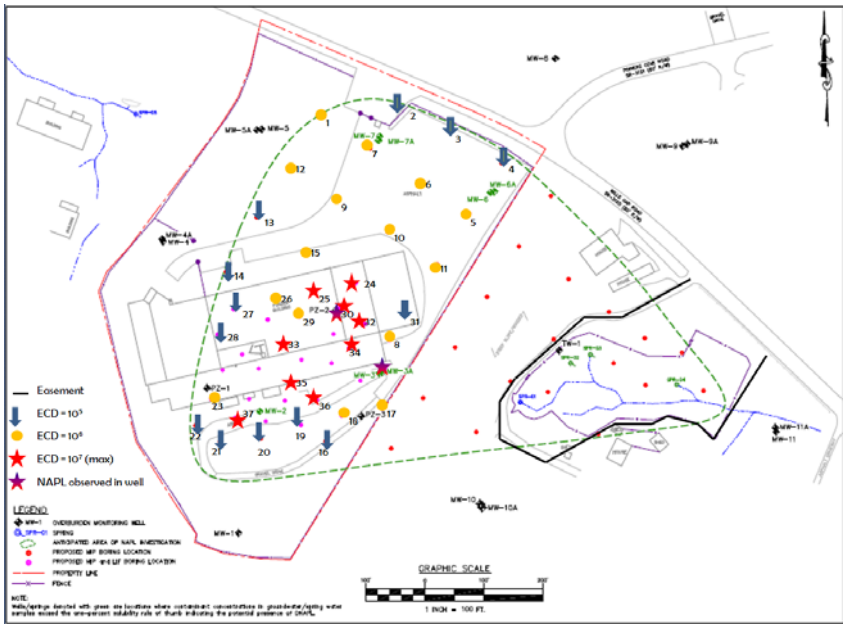
As of last week, borings had been completed at 37 locations. The tool is pushed into the ground until it reaches refusal. The tool is then pulled out and soil cores are removed in order to push the tool further into the ground. The maximum depths have varied across the site with a range of 17.2 feet (MHP-22) to 55 feet (MHP-01).

	Feet below land surface
Minimum Depth	17.2
Maximum Depth	55
Average Depth	36.35



Log of MPH-36 duplicate (red star labeled 36 in figure). ECD response (center column) begins to rise at about 12 feet below the land surface, maxes out the machine response for a few feet, decreases in value and then later increases to maximum response again at about 25 feet below the surface.

The electron capture device (ECD) responds only to chlorinated volatile organic compounds (VOCs), such as TCE. The instrument responses are relative to the concentration of the VOCs encountered. However, they cannot identify the specific VOCs or actual concentration values. Elevated ECD responses typically began at about the water table depth and extended downward, sometimes falling and then rising again. Each boring has been different. The unsaturated soil zone (top 6+ feet) typically had no to minimal ECD response as was previously predicted.



The figure to the right is an edited version of the figure in the NAPL Investigation Work Plan for boring locations. The figure was overlain with the easement boundaries on adjacent eastern property (black line) and qualitative ECD responses collected through October 30, 2013 (maximum value per boring). Responses ranged from minimal to maxing out the machine at 1.4×10^7 microvolts (µV). The borings that have been completed are numbered and have a symbol beside it to give you an idea of the magnitude of ECD responses.

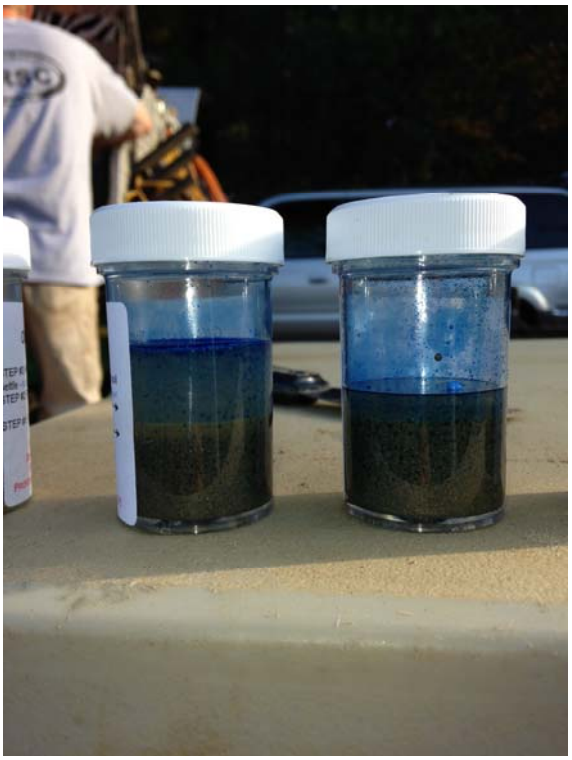
- Blue arrow (lowest values): the ECD responses were in the $1\text{-}10 \times 10^5$ µV range.
- Yellow circle: the ECD responses were a magnitude higher than the blue arrow locations ($1\text{-}10 \times 10^6$ µV range).
- Red star: the ECD responses were the highest that the machine can register (1.4×10^7 µV) and typically also had positive Oil-in-Soil™ test results indicating NAPL.
- Purple star: NAPL observed in a monitoring well or piezometer.
- Small purple & red circles: planned boring locations not yet completed.

Positive Oil-in-Soil™ test result from soil at 20 and 25 feet below the surface

The MiHpt portion of the work is expected to be completed on the main site property within the next two weeks. The highest responses to date have been under and adjacent to the former building. Most locations along the eastern border had 10^6 ECD responses indicating the need to extend testing to the adjacent eastern property to define the extent of NAPL. For the most thorough and complete results, and to formulate a comprehensive cleanup plan, it is imperative to collect this additional data. We are in the process of obtaining access to the eastward property so that we can continue to move forward with the testing.

Zebra Environmental personnel boring at location MHP-37

Soil core from 15-20 feet at boring location MHP-36



Positive Oil-in-Soil™ test results illustrated by the blue dye in the test kit.

Boreholes are filled with a cement/bentonite mixture after they are completed. This is MHP-32 after grouting.

DRINKING WATER WELL SAMPLING

The fourth quarterly drinking water sampling event of 2013 was completed during the week of October 14th.

For homes with Culligan installed whole house water filtration systems, AMEC collected two samples. One sample was collected from water before it enters the filtration system in order to evaluate the quality of the unfiltered ground water and a second sample was collected after the water flows through the filtration system to evaluate the quality of the filtered water entering the home. For homes that have not had the filtration system installed, only one sample was collected to evaluate the quality of the unfiltered ground water.

Collecting pre-filter water sample at a spigot on a well head in April 2013

All samples were analyzed by Pace Analytical Services, Inc. for VOCs that are associated with the CTS Site. These VOCs include: 1,1-dichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, tetrachloroethene, toluene, 1,1,1-trichloroethane, TCE, and vinyl chloride. **The preliminary laboratory results indicated that no VOCs were detected**. Results letters will be mailed to the property owners whose wells were tested after the data has gone through quality assurance and quality control review. **No VOCs have been detected from the prior three quarterly sampling events of 2013**. The next well water sampling event will occur in January 2014.

BUNCOMBE COUNTY WATER LINE EXTENSION UPDATE

If you have questions about the municipal water supply line project, please contact:

Mandy Stone

Assistant County Manager

828-250-5587

or

Mike Dowd

McGill Associates

828-232-6127

Before the loan can be approved for the extension of the city water supply lines to residents within a one mile radius of the CTS Site, the project has to be considered "ready to construct". This includes completion of the design and acquiring all needed easements. The County has had difficulty acquiring all of the easements that are needed and therefore, there will be a delay in the originally planned construction start date. If the remaining easements are obtained soon and all goes well, they hope to be able to advertise the project in November/December which would put the construction start date sometime in February/March. However, this is contingent upon the County finalizing the loan agreement with the State.

Several factors affect the timeline for completion of all water line connections. McGill Associates estimates it will take one year to complete the project after all easements are obtained, the project is put out for bid and awarded to a contractor, and funding is received.

For residents that connect to the municipal water system during this project, the City will waive the normal service connection fees.

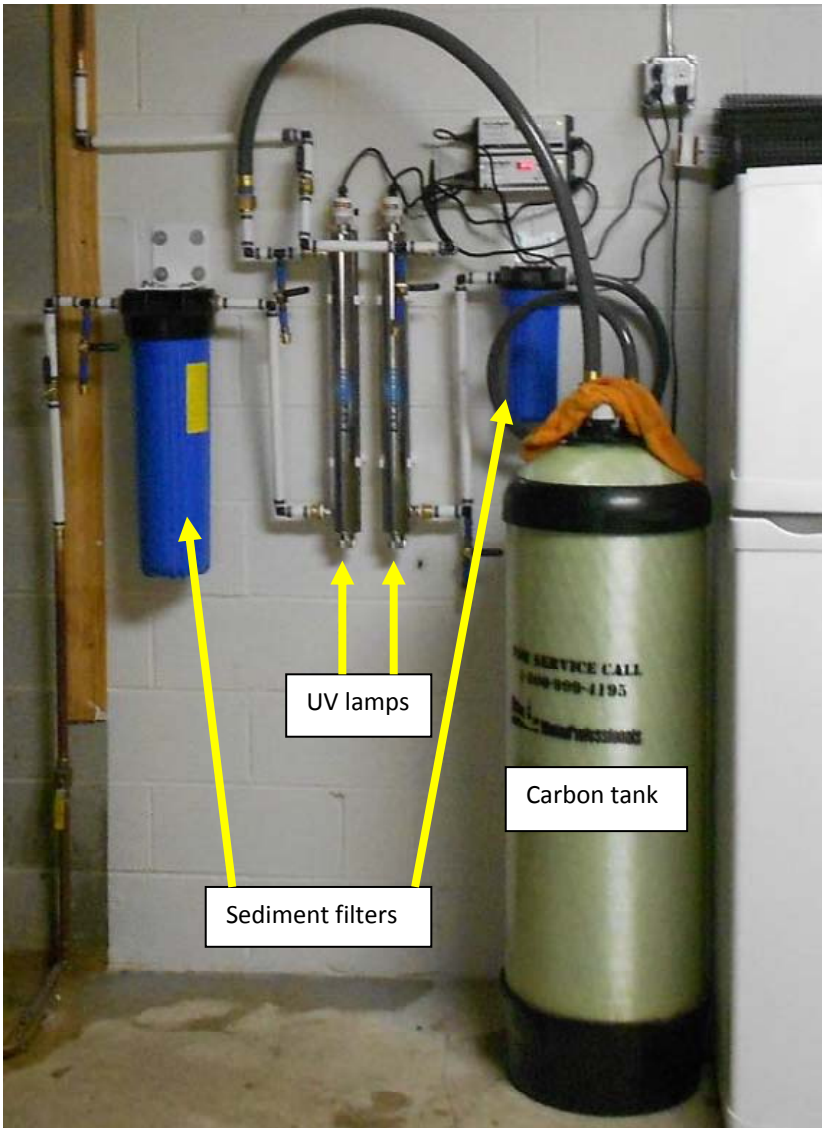
WHOLE HOUSE WATER FILTRATION SYSTEM UPDATE

Culligan will provide standard/routine servicing and maintenance at no cost to the homeowner. Culligan is responsible for repairing malfunctions of the filtration system as a result of ordinary use and operation. If an issue arises, please notify Culligan immediately by calling their local office:

828-251-2420

In 2012, CTS Corporation offered to install, monitor and maintain whole house water filtration systems for homes that are located within a one mile radius of the CTS Site that rely on well or spring water as their drinking water source **at no cost to the home owners**. The filtration design includes two sediment filters, a carbon filter tank, and an ultraviolet light, at a minimum.

Culligan began installing filtration systems on September 11, 2012. As of November 4, 2013, filtration systems have been installed to protect the drinking water of 95 homes. EPA, AMEC and Culligan completed filtration system design appointments for two additional homes on October 29th. It is not too late; if you have not accepted the offer for the filtration system yet but would like to, please contact Samantha or Angela. Our contact information is included on the last page.



Filtration system installed by Culligan at a home within a mile radius of the CTS site

The sediment filters are on a 6-month maintenance schedule. For homes that needed a softener in addition to the standard system, the softeners are on a 4-month maintenance schedule. Carbon tanks and UV lights are replaced annually. Culligan will contact home owners/tenants to schedule appointments for maintenance.

The standard filtration systems will filter out some metals that are attached to sediment, remove organic chemicals that could possibly enter your well water, and kill bacteria that may be in your water. Accepting the filter system offer does not prevent home owners from connecting to the municipal water supply later, if it becomes available. This is being offered as a preventative/safety measure to protect your water until the Remedial Investigation is completed and a final remedy selected, and/or you connect to the municipal water supply, whichever occurs first.

QUESTION OF THE MONTH

To help better educate the community on topics related to the CTS Site, we created this segment in the community update. If you have concerns or questions that you would like more information on, please let us know.

What is the TAG grant and how will it impact the community?

POWER Action Group (POWER) applied for a Technical Assistance Grant (TAG) to be used for activities related to the CTS of Asheville, Inc. Superfund Site. EPA reviewed their application and recently awarded the grant to POWER. POWER will use TAG funds to hire a technical advisor to interpret technical reports and proposed cleanup activities at the site. POWER will also use TAG funds to educate community members about health and environmental issues related to the site. If you would like to join the POWER Action Group or simply receive information from them, please contact Lee Ann Smith at upthishill@bellsouth.net.

As best explained on EPA's website (http://www.epa.gov/superfund/community/tag/index.htm),

"A Technical Assistance Grant (TAG) provides money for activities that help your community participate in decision making at eligible Superfund sites. An initial grant up to $50,000 is available to qualified community groups so they can contract with independent technical advisors to interpret and help the community understand technical information about their site.

Congress made public involvement in decision making an important part of the Superfund process when the program was established by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980. Congress wanted to ensure that the people whose lives were affected by abandoned hazardous wastes would have a say in actions to clean them up. The role of community members in the Superfund process was further strengthened in the Superfund Amendments and Reauthorization Act of 1986 (SARA). With SARA, Congress created EPA's TAG Program. TAGs are available at Superfund sites that are on the EPA's National Priorities List (NPL) or proposed for listing on the NPL, and for which a response action has begun. EPA's NPL is a list of the most hazardous waste sites nationwide. Since the first TAG was awarded in 1988, more than $20 million has been awarded directly to community groups."

COMMUNITY GROUPS

Information Repository

EPA has established an information repository for the public to review some of the documents related to the Site and the Superfund program. The local repository does not include all documents related to the Site. Additional documents may be made available by EPA upon request. The local information repository is located at the:

Pack Memorial Library
67 Haywood Street
Asheville, North Carolina 28801-2834

EPA Website

EPA has a website specifically for the CTS of Asheville, Inc. Superfund Site. The website address is:
http://www.epa.gov/region4/superfund/sites/npl/northcarolina/millsgapnc.html

Websites created by community members

- Clean Asheville: http://cleanasheville.info
- POWER Action Group: http://poweractiongroup.org

EPA is aware of two community groups that have formed regarding the CTS of Asheville, Inc. Superfund Site.

POWER Action Group was established in August 2012 and is led by Lee Ann Smith. POWER stands for Protecting Our Water and Environmental Resources. POWER is the recipient of EPA's Technical Assistance Grant, meets monthly, communicates with EPA regularly, and maintains a Facebook page https://www.facebook.com/CTSAsheville and a website: http://poweractiongroup.org. If you are interested in learning more about or joining this community group please contact Ms. Smith at upthishill@bellsouth.net.

The original community group, **Concerned Citizens for Mills Gap Cleanup**, is led by Glen Horecky. If you are interested in learning more about or joining this group please contact Mr. Horecky at geh4@msn.com.

Contact Information

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TAG Recipient:
POWER Action Group
(Protecting Our Water and Environmental Resources)
Lee Ann Smith
UPTHISHILL@BELLSOUTH.NET

REMEDIAL PROCESS

The EPA and North Carolina Department of Environment and Natural Resources (NCDENR) have performed numerous investigations related to the Site over the years. In March 2011, the Site was proposed to the National Priorities List (NPL), making it eligible to enter into EPA's remedial process. More information about the superfund cleanup process can be found at the following website: http://www.epa.gov/superfund/cleanup/index.htm.

The Site was finalized on the NPL in March 2012. In January 2012, CTS Corporation entered into an agreement with EPA for them to conduct the Remedial Investigation and Feasibility Study (RI/FS) under EPA oversight. The RI determines the nature and extent of contamination. The FS assesses the treatability of site contamination and evaluates the potential performance and cost of treatment technologies. More information about the RI/FS process can be found at the following website: http://www.epa.gov/superfund/cleanup/rifs.htm

The CTS of Asheville, Inc. Superfund Site is complex. Work is planned to occur in several phases. The highest priorities were mentioned on the previous pages of this update, and the vapor intrusion assessment has been completed for property owners that gave permission for sampling. In the future, another work plan will be prepared to extend the investigation, as needed, in order to gather enough information to select and design the most appropriate cleanup options.

QUESTIONS?

Please call or email either Angela or Samantha if you have any questions. We are still building our email distribution list. If you'd like to be added or deleted from our email list, let us know.

Previous Community Updates include historical information. The following updates are available upon request:

1. May 23, 2012
2. May 31, 2012
3. July 10, 2012
4. August 24, 2012
5. September 14, 2012
6. October 18, 2012
7. November 29, 2012
8. January 18, 2013
9. February 21, 2013
10. April 8, 2013
11. May 15, 2013
12. June 27, 2013
13. July 29, 2013
14. September 6, 2013
15. September 30, 2013