INTERIM ACTION

RECORD OF DECISION

CTS of Asheville, Inc. Superfund Site
Asheville, Buncombe County, North Carolina

United States Environmental Protection Agency Region 4
Superfund Division
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303

February 2016

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1.0 DECLARATION

1.1 SITE NAME AND LOCATION

CTS of Asheville, Inc. Superfund Site
235 Mills Gap Road
Asheville, Buncombe County, North Carolina 28803

Superfund Site Identification Number: NCD003149556

1.2 STATEMENT OF BASIS AND PURPOSE

This Interim Action Record of Decision (ROD) documents the U.S. Environmental Protection Agency's (EPA's) selection of a remedy for the CTS of Asheville, Inc. Superfund Site (site), in Asheville, North Carolina, which was chosen in accordance with the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended, 42 U.S.C. §§ 9601-9675 and, to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 C.F.R. Part 300. This decision document explains the factual and legal basis for selecting a remedy to address contamination at the site.

The North Carolina Department of Environmental Quality (NCDEQ) was consulted on the proposed remedy in accordance with CERCLA § 121(f), 42 U.S.C. § 9621(f), and concurs with the selected remedy (see Appendix A).

1.3 ASSESSMENT OF THE SITE

Actual or threatened releases of hazardous substances from the site, if not addressed by implementing the response action selected in this Interim Action ROD, may present an imminent and substantial endangerment to public health, welfare, or the environment. The response action selected in this Interim Action ROD is necessary to protect the public health or welfare or the environment from actual or threatened releases of hazardous substance into the environment.

1.4 DESCRIPTION OF THE SELECTED INTERIM REMEDY

This Interim Remedial Action is a source control action for Non-Aqueous Phase Liquid (NAPL) and trichloroethene (TCE) on the former CTS plant site. The Interim Remedial Action will be followed up with a final site-wide cleanup decision that is not expected for several years. The area to be addressed with this interim action is 3.1 acres (see Figure 1). This source control action addresses approximately 208,250 cubic yards (CYs) of material in the saturated zone between the observed water table and top of competent bedrock. The major components of the selected interim remedy include the following:

- Electrical Resistance Heating (ERH) to treat the mixed NAPL and TCE plume in an approximate 1.2 acre area. ERH will address about 47,250 CYs of saturated material contaminated by NAPL/TCE.
- In-Situ Chemical Oxidation (ISCO) will be utilized to treat the TCE (only) contamination in the expanded Northern Area (approximately 1.9 acres). The volume of the 1.9 acre expanded treatment area is approximately 161,000 CYs.
- Monitoring will be conducted during remedy implementation to ensure adequate protection of on-site workers and the surrounding community. Performance data will be collected to demonstrate the effectiveness of the interim remedy in meeting the Remedial Action Objective (RAO), which is a 95%

reduction in the TCE concentration. Groundwater monitoring of TCE in the deeper bedrock aquifer will also be conducted to evaluate the anticipated decreasing concentration trends over time.

1.5 DECLARATION OF STATUTORY DETERMINATIONS

The selected remedy meets the requirements for remedial actions set forth in CERCLA § 121, 42 U.S.C. § 9621, in that it: 1) is protective of human health and the environment; 2) meets a level or standard of control of the hazardous substances, pollutants, and contaminants which at least attains the legally applicable or relevant and appropriate requirements under federal and more stringent state laws or regulations (unless a statutory waiver is justified); 3) is cost-effective; and 4) utilizes permanent solutions and alternative treatment (or resource recovery) technologies to the maximum extent practicable. In addition, the interim remedy satisfies CERCLA's preference for remedies that employ treatment to permanently and significantly reduce the volume, toxicity or mobility of hazardous substances as a principal element.

Because this Interim Remedial Action will result in hazardous substances remaining on-site above levels that allow for unlimited use and unrestricted exposure, a statutory review will be conducted within five years after initiation of the Interim Remedial Action to ensure that the remedy is, or will be, protective of human health and the environment.

1.6 DATA CERTIFICATION CHECKLIST

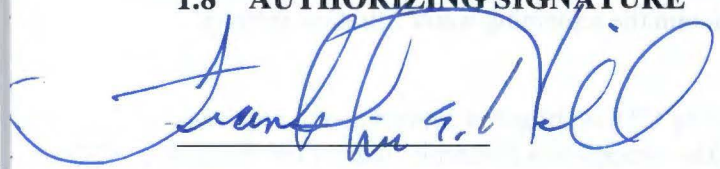
The following information is included in the Decision Summary (Section 2.0) of this ROD. Additional information can be found in the Administrative Record for this site.

- Chemicals of Concern (Section 2.5.3)
- Summary of Site Risks (Section 2.7);
- Remedial Action Objective (Section 2.8);
- How the selected interim remedy addresses NAPL/TCE source material that constitutes principal threat waste (Sections 2.11, 2.12 and 2.13.5)
- Estimated costs of remedial alternatives considered (Sections 2.9.1 and 2.10.7)
- Key factors that led to selecting the interim remedy (Sections 2.12 and 2.14)

1.7 SUPPORT AGENCY ACCEPTANCE

The State of North Carolina Department of Environmental Quality (NCDEQ), as the Support Agency for the CTS of Asheville, Inc. site, concurs with the Interim Action ROD. The NCDEQ concurrence letter has been added to the Administrative Record (Appendix A).

1.8 AUTHORIZING SIGNATURE



2/11/2016

Franklin E. Hill, Director
Superfund Division
U.S. EPA Region 4

Date

2.0 DECISION SUMMARY

2.1 SITE NAME, LOCATION, AND DESCRIPTION

The CTS of Asheville, Inc. Superfund Site is located at 235 Mills Gap Road in Asheville, North Carolina 28803. The approximate center of the site is located at north latitude 35°29'36" and west longitude 82°30'25". The site formerly contained an approximate 95,000-square foot, single-story brick and metal-framed structure on the southern portion of the site. The building was demolished in December 2011, and the concrete building slab remains intact. The northeastern portion of the site contains an asphalt-paved parking area and asphalt paved driveways are located parallel to the north (front) of the former building and southeast (rear) of the former building. A six-foot high chain-link fence surrounds the site and a locked gate at the north end of the site controls access to the site from Mills Gap Road. The site has been vacant and unoccupied since the mid-1990s. The site and adjacent property boundaries are illustrated on Figure 1.

2.2 SITE HISTORY AND ENFORCEMENT ACTIVITIES

International Resistance Company, (now Northrop Grumman Systems Corporation as the result of a series of mergers) owned and operated the site from 1952 to 1959, when CTS of Asheville, Inc. purchased the real property, building, and equipment. Arden Electroplating, Inc. leased a portion of the building from December 1985 until December 1986, when it was sold to Mills Gap Road Associates (MGRA). CTS manufactured electronic components used in auto parts and hearing aids from 1959 to April 1986 when plant operations ceased. Small electronic components were electroplated with tin, nickel, zinc and silver as one step in the process. Solvents, including TCE were used to clean, or degrease, the parts before electroplating. Disposal and/or recycling activities at the facility prior to 1959 are unknown. From 1959 to 1980, metal-bearing rinse waters and alkaline cleaners that could not be reclaimed from the electroplating process were reportedly disposed of through the municipal sewer system, while concentrated metals and solvent wastes were placed in drums for off-site disposal/recycling. After 1980, wastes were accumulated in drums on-site prior to off-site disposal/recycling.

Numerous environmental investigations have been conducted at the site since the late 1980s (See Section 2.5.4 below). The site was proposed to the National Priorities List (NPL) in March 2011, and became final on the NPL in March 2012.

Three removal actions have been conducted at the site under a 2004 Administrative Order on Consent between EPA, CTS, and MGRA. From July 2006 to July 2010, a Soil Vapor Extraction (SVE) system operated at the site to remove volatile organic compounds (VOCs) from the subsurface, above the groundwater table. An estimated 6,473 pounds of VOCs were removed from the unsaturated zone over that four year period.

From September 2012 to August 2014, CTS installed 101 water supply filtration systems in residences located within a one mile radius of the site who relied on groundwater as their drinking water supply. The filtration systems were installed as a precautionary measure. In 2014 and 2015, municipal water supply lines were installed in the vicinity of the site by Buncombe County. Eighty-seven residences with filtration systems elected to connect to the municipal water line. CTS will continue to maintain the remaining water filtration systems until they are no longer warranted.

In September 2014, a springs vapor removal system was installed by CTS on property immediately to the east of the site, to reduce TCE concentrations in outdoor/indoor air. The remediation system includes a combination of air sparging and vapor extraction. Air sparging pumps push air into the surface water and subsurface at seven locations. Vapors are extracted using a vacuum connected to extraction points at 12 locations and then treated by carbon in canisters. The area was covered with a low density polyethylene liner to increase the system's efficiency. Construction began on September 10, 2014 and the system has been in continuous

operation since October 21, 2014. Monitoring indicates the system has been very effective at reducing TCE concentrations in the air and spring water. As of mid-April 2015, the vapor system removed approximately 42 pounds of VOCs from the environment.

CTS also committed to conduct a site-wide Remedial Investigation/Feasibility Study (RI/FS) under the terms of an Administrative Settlement Agreement and Order on Consent (AOC), which took effect on January 26, 2012. The Focused Feasibility Study (FFS) that lays the foundation for this Interim Action ROD was developed by CTS according to that agreement.

2.3 COMMUNITY PARTICIPATION

As part of the on-going community involvement program, EPA continues to pro-actively engage and respond to community members, and federal/state/local elected officials. EPA's Community Involvement Plan (CIP), revised in February 2016, is a site-specific strategy that enables meaningful community involvement throughout the Superfund cleanup process. The CIP specifies planned community involvement activities to address community needs, concerns, expectations, and will enable community members affected by the site to understand ways in which they can participate in decision-making throughout the cleanup process. Public interest in the site remains high.

There are two active environmental community groups associated with the site, the Mills Gap Road Contaminated Groundwater Community Advisory Group and the POWER Action Group. The POWER Action Group (Protecting Our Water and Environmental Resources) was awarded EPA's Technical Assistance Grant (TAG) in 2013. The TAG helps communities participate in Superfund cleanup decision-making. It provides funding to community groups to contract their own technical advisor to interpret and explain technical reports, site conditions, and EPA's proposed cleanup plans and decisions throughout the Superfund process. The EPA Remedial Project Manager (RPM) and Community Involvement Coordinator (CIC) work closely with the technical advisor to coordinate technical reviews of work plans and reports.

The RPM and CIC communicate regularly with the property owners immediately east of the site, where the vapor recovery system was installed in the Fall of 2014. This generally involves communication of system performance/maintenance, distribution of air monitoring results, coordinating future air sampling events, and resolving other issues as they arise. EPA also coordinates closely with the property owner of the undeveloped property to west of this site. Upon request, EPA conducts meetings with several Homeowners Associations in the area. EPA also provides site specific information to the media via press releases and desk statements. The Asheville Citizen Times (local newspaper) and WLOS (local TV station) have shown the most interest and coverage of site activities recently.

The CIC developed an email distribution list to keep the community updated on current site status, approved work plans and other documents. This list is frequently updated, and to date there are approximately 400 contacts who have expressed interest in receiving information about the site. This method has been well received and proven to be a very effective communication tool. Prior to the public release of the Interim Remedial Action Proposed Plan, the RPM and CIC also conducted additional community outreach efforts in 2015 by meeting separately with groups that were interested in the details of EPA's Proposed Plan and what the next steps would be in the process.

The draft NAPL Area Focused Feasibility Study (FFS) Report, prepared by Amec Foster Wheeler (AMEC) on behalf of CTS Corporation, was submitted to the EPA on July 31, 2015. The EPA sent comments to CTS on the draft report on August 26, 2015. The EPA announced on September 1, 2015, that a public meeting would be held on October 13, 2015 to present and discuss the Interim Remedial Action Proposed Plan. A final NAPL Area FFS Report was submitted to the EPA on September 10, 2015. EPA agreed with CTS's recommendation of using Electrical Resistance Heating (ERH) as the cleanup technology. However, EPA requested that CTS

consider expanding the proposed one-acre ERH treatment area with the interim source control action. Alternatively, EPA suggested a hybrid approach that includes thermally enhanced biodegradation outside of the proposed one acre ERH treatment area. On September 30, 2015, EPA released the Interim Remedial Action Proposed Plan to the community for a 30-day comment period. The October 2015 Proposed Plan is attached as Appendix D. The Proposed Plan was also made available for review at the site information repository at the Pack Memorial Library, 67 Haywood Street in Asheville. The supporting Administrative Record was posted online at: http://semspub.epa.gov/src/collection/04/AR63944.

The initial 30-day comment period for the Interim Remedial Action Proposed Plan lasted from October 1, 2015, through October 30, 2015. At the October 13, 2015 public meeting, EPA gave a formal presentation of the site history, previous removal actions, preferred remedy, and other cleanup options for the site. The majority of the comments from the public encouraged the EPA to expand the one-acre treatment area to include additional acreage to the north. On October 29, 2015, EPA announced that the comment period would be extended 30 days through November 29, 2015. The extension of the comment period was to allow for CTS to evaluate treatment of the Northern Area. On November 25, 2015, AMEC submitted the NAPL Area FFS Report Addendum to EPA.

The Responsiveness Summary in Section 3.0 below provides further discussion regarding the public comments received during the 60-day comment period. Appendix B includes the recorded transcript from the October 13, 2015 public meeting. Appendix C provides redacted copies of all public comments sent to the RPM during the 60-day comment period.

2.4 SCOPE AND ROLE OF RESPONSE ACTION

As noted above in Section 1.4, this Interim Remedial Action is a source control action for NAPL and TCE on the former CTS plant site. The area to be addressed with this interim action is 3.1 acres. This area is illustrated as the "NAPL Area Remediation" (in blue) and "Northern Remediation Area" (in green) on Figure 1. The volume to be addressed with this interim action is approximately 208,250 cubic yards (CYs) of material in the saturated zone between the observed water table and top of competent bedrock. A prior SVE removal action addressed VOCs in the vadose (unsaturated) zone of this general area.

This Interim Action ROD describes the short-term remediation plan for the site that will be followed up later with a final "site-wide" ROD. EPA expects that the interim source control action will mitigate the TCE transport to the eastern/western springs; and greatly improve the quality of the deeper bedrock aquifer. The scope of the final "site-wide" ROD depends on the ultimate success of the Interim Remedial Action. It will require several years to implement the interim source control action and to sufficiently monitor the resultant TCE concentration trends in the bedrock groundwater aquifer. The final "site-wide" ROD will address any remaining unacceptable risks posed to human health and the environment posed by residual NAPL/TCE mass in the subsurface not addressed by this Interim Remedial Action.

2.5 SITE CHARACTERISITCS

2.5.1 Conceptual Site Model

A site-wide Remedial Investigation has not been completed yet. However, in February 2015 EPA released a Conceptual Site Model (CSM) based on interpretations of existing physical and chemical data. The data EPA used to develop the CSM is presented in the North Carolina Remedial Investigation, the EPA NPL Listing Investigations, the EPA Potable Well Sampling, and the CTS NAPL Investigation Reports. Field work included monitoring well installation and sampling, private well sampling, borehole geophysics and evaluation (by the US Geologic Survey) in private wells, pumping evaluations in private wells, borehole geophysics in CTS monitoring wells, geologic mapping by the North Carolina Geologic Survey, spring and surface water

sampling, membrane interface probe (MIP) screening, Laser Induced Fluorescence (LIF) screening, dye testing, and soil sampling. The February 2015 EPA Hydrogeologic and Contaminant CSM is part of the Administrative Record. It is important to note that a CSM is dynamic, and the development is iterative. A CSM will change as new data is collected, and uncertainties in the model are addressed. The CSM will continue to be updated as site complexities are further understood.

2.5.2 Overview

The area surrounding the site is rural and contains residential and light industrial properties. The site is relatively flat and is situated on a "saddle" between Busbee Mountain to the north and Brown Mountain to the south-southwest. The geology under the site consists of fill material, residual soil (overburden) and bedrock. The depth to the groundwater table generally fluctuates from 15 to 49 feet below ground surface (bgs), depending on rainfall. The depth to bedrock ranges from 28 to 81 feet bgs.

Groundwater velocity is in the 10 to 100 feet per year range. Groundwater in the overburden generally flows two directions: towards the eastern springs remediation area; and toward another springs area to the west of the site. There is an approximate one-acre plume of light NAPL that is weathered fuel oil mixed with high concentrations of TCE. There is a dissolved phase VOC (only) plume extending north of the NAPL area that moves east and west towards the springs discharge zones (See Figure 1).

2.5.3 Chemicals of Concern

Light NAPL and TCE are the primary chemicals of concern (COCs) addressed by this decision document. Other secondary COCs include chlorinated VOC breakdown products.

2.5.4 Summary of Sampling Results and Other Investigations

Law Environmental, Inc. conducted assessment activities at the site in 1987. The assessment activities were performed for CTS for the purpose of obtaining a general environmental status of the facility. Assessment activities performed inside the former building included subsurface soil sampling, surface wipes, sampling of compressor oil, and sampling of solid residue. Assessment activities performed outside of the building included subsurface soil sampling. Laboratory analytical results of samples collected inside the former building indicated the presence of VOCs, including TCE, in the plating and paint curing areas. Laboratory results of soil samples collected outside of the former building also indicated the presence of VOCs.

In 1989 and 1990, an EPA contractor (NUS) conducted Screening Investigations at the site. NUS collected surface and subsurface soil samples, sediment and surface water samples from surface waters east and west of the site, and a water sample from a private water supply well. Concentrations of VOCs were detected in the surface water and sediment samples. Based on the analysis of possible migration pathways and the results of the sampling investigation, NUS recommended that no further action be planned for the site.

In July 1999, NCDENR (now NCDEQ) collected water samples from three springs east of the site. The spring samples contained VOCs related to chlorinated solvents and petroleum. TCE was detected at concentrations ranging from 8.7 to 21,000 µg/L.

Also in July 1999, NCDENR identified nine private water supply wells within a one-quarter mile of the site. Water supply well samples were collected and analyzed for VOCs. One of the nine wells contained TCE at 270 µg/L (pre-filter) and 170 µg/L (post-filter). TCE was not detected in the other eight water supply wells sampled. NCDENR requested that the EPA Emergency Response and Removal Branch review site information to determine if the site qualified for a removal action under the federal Superfund program.

In November 1999, an EPA contractor (Tetra Tech) conducted a site reconnaissance and sampling investigation. Tetra Tech collected surface soil samples, subsurface soil samples, and sediment samples. The soil and sediment samples contained VOCs related to chlorinated solvents and petroleum.

In August 2000, EPA Response Engineering and Analytical Contract (REAC) personnel conducted a geophysical investigation to determine if buried sources of contamination (e.g., drums of waste material) were located at the site. REAC personnel identified several potential target areas through the geophysical surveys and observations of surface debris. In September 2000, trenches were excavated in these areas and soil samples were collected. Samples were also collected from two of the springs east of the site. The soil and spring samples contained VOCs related to chlorinated solvents and petroleum. Buried sources of contamination were not identified during the trenching activities.

In May 2001, an EPA contractor (Lockheed Martin) collected subsurface soil samples from 12 borings located below or near the former building. The soil samples contained VOCs related to chlorinated solvents and petroleum.

In February 2003, an EPA contractor (Weston Solutions) collected five spring/surface water samples and eight private water supply well samples. The spring/surface water samples collected from the springs area east of the site contained VOCs related to chlorinated solvents and petroleum. Concentrations of VOCs, semivolatile compounds (SVOCs), or total petroleum hydrocarbons (TPH) were not detected in the water supply well samples.

In June and July 2004, CTS's contractor (MACTEC now known as Amec Foster Wheeler) conducted an investigation pursuant to the 2004 Administrative Order on Consent for Removal Action between the EPA Region 4, CTS, and MGRA. The primary intent of the investigation was to delineate the extent of contamination in unsaturated soil at the site. Fifty-five soil samples were collected from 22 borings in and adjacent to the former site building. Three piezometers were installed to provide groundwater elevation information. A temporary well was installed east of the site near the previously-identified contaminated springs and water samples were collected from the springs and the temporary well. All of the samples were analyzed for VOCs, SVOCs, TPH, and polychlorinated biphenyls. Selected samples were analyzed for metals, cyanide, and pesticides. A reconnaissance was also conducted to identify water supply wells near the site and an evaluation of surface water discharge from the springs east of the site was conducted. The soil and spring samples contained VOCs, SVOCs, and TPH related to chlorinated solvents and petroleum.

In August 2004, a Soil Vapor Extraction (SVE) pilot study was conducted to evaluate the feasibility of using SVE for removing VOCs from unsaturated soil beneath and adjacent to the former site building, as delineated in the 2004 investigation. The results of the pilot study indicated that SVE would be an appropriate removal methodology. A SVE system was designed and constructed at the site in June and July 2006 and became operational on July 20, 2006.

In February 2006, CTS's contractor (MACTEC) collected water supply well samples from five locations within a one-quarter mile radius of the site. Samples were analyzed for VOCs, SVOCs, and TPH. The analyzed compounds were not detected in the water supply well samples.

From November 2007 through January 2008, NCDENR, with assistance from EPA contractors, collected water supply samples from 75 residences and analyzed the samples for VOCs. Site-related VOCs (cis-1,2-dichloroethene [cis-1,2-DCE] and TCE) were detected in two water supply well samples collected from wells located approximately 4,000 feet northeast of the site.

In November and December 2007, NCDENR, with assistance from EPA contractors, collected 14 surface soil samples and spring/surface water samples. The soil samples were collected from locations within

approximately 1,500 feet of the site boundary and analyzed for VOCs, SVOCs, and metals. Site-related VOCs were not detected in the soil samples. Three SVOCs and seven metals were detected at concentrations below EPA's residential Removal Action Levels. The spring/surface water samples were collected from springs located east and west of the site, springs located on Sweeten Creek Road, and from the unnamed tributary that is formed from the springs east of the site. Site-related VOCs and SVOCs were detected in the spring and surface water samples collected nearest the site (i.e., not in the Sweeten Creek Road spring samples).

In December 2007 and January 2008, an EPA contractor (TN & Associates now known as OTIE) collected 15 subsurface soil and groundwater samples from locations at the site and within approximately 1,200 feet of the site boundary. The subsurface soil samples were collected from depths ranging from 2 to 30 feet bgs. The soil and groundwater samples were submitted for analysis of VOCs, SVOCs, metals, and cyanide. Site-related VOCs and SVOCs were not detected in the soil samples. Site-related VOCs and one SVOC were detected in groundwater samples collected at and immediately adjacent to the site to the east. Metals were detected in the soil and groundwater samples at concentrations that were within naturally-occurring metal concentrations. Cyanide was detected in the soil and groundwater samples; however, cyanide has not been historically detected at elevated concentrations at the site and is not considered a site-related contaminant of concern

In December 2007, EPA and their contractors collected air samples within approximately 1,200 feet of the site boundary. The following air samples were collected: 18 soil gas, 10 sub-slab, 12 crawlspace/basement, and 7 ambient. The air samples were submitted for analysis of VOCs. Site-related VOC concentrations in samples collected from residences were below EPA's then-applicable removal action concentrations.

Also in December 2007, an EPA contractor (Lockheed Martin) conducted an air investigation using a Trace Atmospheric Gas Analyzer (TAGA) to scan ambient air in the vicinity of the site. In August 2008, an EPA Contractor (TN & Associates now OTIE) collected eight residential air samples (i.e., sub-slab, crawlspace, and indoor) and 11 ambient air samples. The air samples were submitted for analysis of VOCs. Site-related VOC concentrations in samples collected from residences were below EPA's then-applicable removal action concentrations.

From September 2008 through March 2012, an EPA contractor (OTIE) collected water supply samples on a quarterly basis from water supply wells located within one mile of the site. The water supply well samples were submitted for analysis of VOCs, SVOCs, metals, and cyanide. Site-related compounds were not detected in the water supply samples.

In September and October 2008, CTS's contractor (MACTEC) collected soil and groundwater samples in the vicinity of the springs area east of the site. The samples were used to design an ozone injection pilot study to determine the feasibility of an ozone injection system reducing VOC concentrations in the groundwater that discharges to the springs. The pilot study was conducted from March 2009 through January 2010.

From September 2008 through July 2009, CTS's contractor (MACTEC) conducted Phase I Remedial Investigation activities under the direction of NCDENR. Monitoring wells were installed on- and off-site, and soil, groundwater, and surface water samples were collected during several phases of work. The extent of the VOC groundwater plume was delineated in the overburden (i.e., above bedrock) to the north and south. Analytical results of surface water samples were similar to historical results.

From January 2009 to May 2010, EPA and their contractors conducted a series of studies to collect data for listing the site on the NPL. The North Carolina Geological Survey (NCGS) and the United States Geological Survey also conducted studies in the vicinity of the site to support the NPL listing. Hydrogeologic information, primarily related to groundwater conditions in bedrock, was gathered during these studies.

In December 2010, CTS's contractor (MACTEC) conducted a geophysical investigation to determine if buried sources of contamination (e.g., drums of waste) were located in the southern portion of the site. Several surface geophysical methods were used to survey the area. Buried sources of contamination were not identified.

In October 2012, CTS's contractor (AMEC) conducted vapor intrusion assessment activities at three residences located west of the site. Crawlspace/basement and ambient air samples were collected and analyzed for Site-related VOCs. Concentrations of the detected VOCs were below unacceptable risk levels for residential occupants.

Beginning in January 2013, CTS's contractor (AMEC) began quarterly sampling of water supply wells located within one mile of the site. As of May 2015, 10 quarterly water supply sampling events had been conducted. Water supply samples are analyzed for site- associated VOCs, as well as toluene as requested by EPA. Site-related VOCs have not been detected in the water supply samples.

From September 2013 to February 2014, CTS's contractor (AMEC) conducted a NAPL Investigation at the site. The objective of the NAPL Investigation was to gain an understanding of the nature and extent of NAPL in the overburden at the site. The NAPL Investigation included collection of significant qualitative data using direct sensing methods. Quantitative data (e.g., measurement and analysis of NAPL, soil, and groundwater sample analyses, etc.) was also collected to correlate/confirm the direct sensing data.

In November 2013, CTS's contractor (AMEC) conducted confirmation soil sampling and analysis associated with the SVE system. The objective of the Confirmation Sampling and Analysis Plan (CSAP) was to evaluate the effectiveness of the SVE system at removing VOCs from the unsaturated zone at the site. Comparison of TCE concentrations in pre-removal soil samples to post-removal CSAP soil samples indicates an average TCE percent reduction of 95 percent in unsaturated soil. Concentrations of TCE in the upper 10 feet of soil in the identified source area were below the EPA's Regional Screening Level for industrial soil.

In April 2014, CTS's contractor (AMEC) conducted vapor intrusion assessment activities at three residences located east of the site. Indoor, crawlspace, and ambient air samples were collected and analyzed for site-related VOCs. Concentrations of TCE in the indoor air samples were greater than EPA Region 4's recommended residential indoor air Removal Management Level (RML) of 2 $\mu g/m^3$. This finding resulted in temporary relocation of residents in the eastern springs area, while the vapor removal and capture system was installed as discussed in Section 2.2 above. TCE in indoor air samples were less than EPA's RML following installation of the system, and residents returned to their homes in November 2014.

Based on the eastern springs air sampling results, EPA requested air assessment at additional residences located further northeast and east of the site. Crawlspace, and/or ambient air samples were collected at these outer perimeter residences from June 2014 – April 2015. Concentrations of TCE in the air samples were less than EPA's RML, so no further action was required for the outer perimeter residences.

2.6 CURRENT AND POTENTIAL FUTURE LAND AND RESOURCE USES

The nine acre former plant site (e.g. within the fence-line) subject to this decision document is vacant and unoccupied as it has been since the mid-1990s. The property is owned by MGRA and currently zoned for commercial/industrial land-use. Future land and resource uses are dependent on site cleanup and are unknown at this time. The groundwater is considered as Class GA or GSA pursuant to NC Groundwater Quality Standards at 15A NCAC 02I.0201, which includes potential water supply for potable usage.

2.7 SUMMARY OF SITE RISKS

The site-wide Remedial Investigation has not been completed yet, and as such comprehensive human health and ecological risk assessments required per CERCLA guidance and the AOC between EPA and CTS have not been conducted. However, groundwater at the site is contaminated with chlorinated solvents such as TCE, cis-1,2-dichloroethane (cis-DCE), and 1,1,1-trichloroethane (TCA). These chemicals are considered hazardous substances under CERCLA. TCE has been detected in groundwater at levels which exceed the EPA drinking water standard (Maximum Contaminant Level) of 5 parts per billion.

These contaminants pose a potential risk to human health and the environment particularly through the air inhalation and/or drinking water exposure pathways. The NAPL/TCE contaminant mass is also a source of the dissolved-phase VOC groundwater contamination. As part of EPA's site management strategy, these potential human health risks have been eliminated by short-term removal actions (e.g. water line extension/filtration systems for drinking water; vapor recovery in eastern springs for air) while this interim source control action can be implemented and the final site-wide remedy can be developed.

This Interim Remedial Action addresses the risks to human health and the environment via source control. If this NAPL/TCE contaminant mass in the saturated thickness above the competent bedrock interface is not remediated, it will continue to migrate toward the eastern/western spring areas and possibly the deeper fractured bedrock. For that reason, the response action selected in this Interim Action ROD is necessary to protect the public health or welfare or the environment from actual or threatened releases of hazardous substances into the environment.

2.8 INTERIM REMEDIAL ACTION OBJECTIVES

The general Interim Remedial Action Objective (RAO) for this ROD is to significantly reduce the mass of NAPL and TCE that is the source of the dissolved-phase VOC groundwater plume. Over time, while the final site-wide cleanup plan is developed, the dissolved-phase VOC plume is expected to decrease in size and concentration. The specific RAO for this Interim ROD is:

- Reduce the TCE concentration in the 3.1-acre interim action treatment area by 95%.

For the 1.2-acre ERH treatment area, the 95% reduction of TCE will apply to saturated soil, NAPL, and groundwater. For the 1.9-acre ISCO treatment area, the 95% reduction of TCE will apply to groundwater. Achievement of this RAO will be determined by pre-treatment and post-treatment verification sampling within the 3.1-acre interim action treatment area.

2.9 DESCRIPTION OF ALTERNATIVES

CERCLA § 121(b)(1), 42 U.S.C. § 9621(b)(1), requires remedial actions to be protective of human health and the environment, be cost-effective, and utilize permanent solutions and alternative treatment technologies and resource recovery alternatives to the maximum extent practicable. Section 121(b)(1) also establishes a preference for remedial actions which employ, as a principal element, treatment to permanently and significantly reduce the volume, toxicity, or mobility of the hazardous substances, pollutants and contaminants at a site. Further, CERCLA § 121(d), 42 U.S.C. § 9621(d), specifies that a remedial action must attain a level or standard of control of the hazardous substances, pollutants, and contaminants, which at least attains applicable or relevant and appropriate requirements (ARARs) under federal and more stringent state laws, unless a waiver can be justified pursuant to CERCLA § 121(d)(4), 42 U.S.C. § 9621(d)(4).

The NCP at 40 CFR §300.430(e)(7) describes methods for screening cleanup technologies in order to develop applicable remedial alternatives. During the initial development and screening of alternatives, several

potentially applicable remedial technologies or process options for addressing NAPL and TCE contaminated saturated soils in the one-acre source area were identified and screened based on effectiveness and technical implementability at the site. Detailed descriptions of technologies, process options, and the five remedial alternatives for addressing the one-acre NAPL/TCE source area can be found in the NAPL Area FFS Study Report, dated July 31, 2015, which is part of the Administrative Record. In accordance with the NCP at 40 C.F.R. § 300.430(e) (6), EPA also evaluated a no action alternative that serves as the baseline for the evaluation of the other remedial alternatives.

As discussed in Section 2.3 and Section 3.0, near the end of the initial 30-day comment period, EPA requested that CTS evaluate treating an expanded area and volume with the Interim Remedial Action. This is consistent with comments that EPA provided on the Draft FFS Report that stated, "*EPA's overarching goal is to maximize the reduction of TCE mass in the subsurface at the CTS site with the forthcoming interim source control action.*" CTS agreed to evaluate two expanded treatment area options, and during the second 30-day comment period submitted an Addendum to the FFS Report to EPA on November 25, 2015. The remedial alternatives evaluated in the initial FFS Report and the FFS Addendum are summarized below.

2.9.1 Remedial Alternatives for the One-Acre NAPL/TCE Source Area

This section describes the remedial alternatives presented in the initial FFS Report. The Draft FFS Report was submitted to EPA on July 31, 2015, and the final FFS Report was submitted on September 10, 2015. The area to be treated by this set of alternatives is the one acre NAPL/TCE source area. The average saturated thickness under this one-acre area was assumed to be 25 feet, which equates to a volume of approximately 40,500 CYs.

Alternative 1: No Further Action

The Superfund program requires that the "no-action" alternative be considered as a baseline for comparison with the other alternatives. The no-action alternative does not include any physical remedial measures beyond those removal actions already implemented to address the contamination at the site. This "status quo" alternative assumes nothing would be done in the short term to address the NAPL/TCE source area. The no-action alternative defers all required cleanup work to the final site-wide ROD that is not expected for several years. As such, the cost of this remedial alternative is $0.

Alternative 2: Multi-Phase Extraction (MPE)

Multi-phase extraction (MPE) removes NAPL, groundwater, and soil vapor from the subsurface using vacuum well(s). MPE would involve installation of extraction wells and a system to recover the NAPL. The extracted fluids and vapor would be treated in an aboveground treatment system on-site. After separation, the groundwater would be treated and disposed on-site, while the NAPL would be containerized and disposed off-site. It was assumed that the MPE system would have to operate for a 10-year period. The estimated cost to implement the MPE alternative is $2,670,000.

Alternative 3: Electrical Resistance Heating (ERH)

Electrical resistance heating (ERH) involves heating the subsurface using electrodes installed in the zone of contamination. The electric current passed between the electrodes heats the saturated zone where there is sufficient moisture to conduct electricity. The heat "boils" the NAPL/TCE, and vent wells are used to recover the vapors. The vapors are treated aboveground and discharged to the air. Any NAPL accumulation in the vent wells would be recovered and transported off-site for disposal. It was assumed that 19 months would be required to design, install and fully operate the ERH system to meet the RAO. The estimated cost to implement the ERH alternative is $4,150,000.

Alternative 4: In-Situ Chemical Oxidation (ISCO)

In-situ chemical oxidation (ISCO) involves addition of chemicals into the zone of contamination via injection points. The chemicals oxidize the NAPL/TCE and break down the contaminants into harmless by-products like carbon dioxide and water. ISCO is typically implemented with a primary injection event and one or more polishing injections to reduce contaminant concentrations and mass to the desired level. Chemical oxidation using catalyzed hydrogen peroxide gives off heat, so vent wells would be required to recover vapor and any NAPL. ISCO would require installation of injection wells and an aboveground system to recover and treat vapors. It was assumed that ISCO would require three years to complete, including one primary injection event and two polishing steps. The estimated cost to implement the ISCO alternative is $3,820,000.

Alternative 5: Surfactant Flooding

Surfactant flooding involves injection of a substrate into the zone of contamination to increase the mobility of the NAPL phase. The NAPL and groundwater are then removed from the subsurface via extraction wells. After separation aboveground, the groundwater would be treated and discharged to the municipal sewer system, while the NAPL would be containerized and disposed off-site. Surfactant flooding would require installation of injection/extraction wells and an aboveground treatment system. It was assumed that surfactant flooding would require two years to complete, including a primary flooding event and one follow-up step. The estimated cost to implement the surfactant flooding alternative is $3,520,000.

2.9.2 Remedial Alternatives for the Expanded Northern Treatment Area

This section describes the remedial alternatives presented in the FFS Addendum Report that was submitted to EPA on November 25, 2015. EPA's Proposed Plan (Appendix D) released on September 30, 2015 selected ERH (Alternative 3 above) as the preferred alternative to address the one-acre NAPL/TCE source area. Because of the inclusion of the expanded Northern Area to the Interim Remedial Action scope, a relatively small area of dissolved phase TCE south of the one-acre NAPL/TCE plume will be added to the ERH treatment area. This area is approximately 9,100 square feet (0.21 acres), and the average saturated thickness is about 20 feet. Based on these dimensions, the additional volume is approximately 6,750 CYs. The total NAPL/TCE source area to be remediated by ERH is now 1.2 acres. The total volume to be remediated by ERH is 47,250 CYs. The cost to treat the additional area via ERH is $585,000. Therefore, the cost to treat the 1.2-acre NAPL/TCE source via ERH is $4,735,000.

The expanded Northern Area that was added to the Interim Remedial Action has an areal extent of approximately 82,000 square feet (about 1.9 acres). The bedrock interface of the Northern Area dips substantially. The average saturated thickness of the Northern Area is 53 feet, more than double the average thickness of the 1.2-acre NAPL/TCE source area. The volume of material to be treated in the Northern Area is approximately 161,000 CYs.

Alternative 1: No Further Action

The no action alternative is retained because it provides the baseline for comparing alternatives and it is mandated by Superfund guidance. Under this alternative, the Northern Area would not be included in the Interim Remedial Action scope. Treatment in the Northern Area would be deferred to the final site-wide ROD that is not expected for several years. The cost of the no action alternative is therefore $0.

Alternative 2: Electrical Resistance Heating (ERH)

This is the same cleanup technology EPA selected as the preferred remedy in the October 2015 Proposed Plan for the one-acre NAPL/TCE source area. Therefore, further description of the technology is not provided here.

Implementation of ERH for both the NAPL/TCE source area and the Northern Area at the same time would require power services upgrades such as new power lines, transformers, switches, etc. Upgrading the power grid in the vicinity of the site would require significant time and costs. In addition, there would likely be equipment availability limitations as ERH vendors have a limited number of power control units. For these reasons, ERH for the two areas at the same time was not considered practical.

Materials for implementation of ERH in the NAPL/TCE source area and Northern Area would be mobilized at the same time. Installation of the ERH system and heating of the NAPL/TCE source area would occur first. While the heating effort is underway in the NAPL/TCE source area, electrodes would be installed in the Northern Area. Once treatment confirmation sampling indicates the RAO has been achieved in the NAPL/TCE source area, the surface equipment would be moved and the heating effort in the Northern Area would begin. Implementation of ERH in the NAPL/TCE source area and Northern Area is estimated to take 2.5 years from notice to proceed. The estimated cost for ERH in the Northern Area is $8,700,000.

Alternative 3: In-Situ Chemical Oxidation (ISCO)

ISCO in the Northern Area is essentially the same technology described above for the NAPL/TCE source area. The primary difference in this case is the oxidant selected to destroy the chemicals. For the NAPL/TCE source area, catalyzed hydrogen peroxide was selected in the FFS Report since a more robust oxidant was needed to break down the mixture of NAPL and TCE. This reaction is exothermic, so vent wells would have been required if ISCO was selected for the NAPL/TCE source area.

The expanded Northern Treatment Area contains TCE only in the saturated zone above the top of bedrock. Therefore, potassium permanganate was chosen as the oxidant in the Northern Area. Potassium permanganate is a powerful oxidant that is commonly used to destroy dissolved phase chlorinated VOCs, and it does not require vent wells. Permanganate can be injected as a liquid solution via injection points or emplaced as a solid via hydraulic delivery methods. Solid potassium permanganate, which has a greater oxidation capacity than liquid, was selected for application in the Northern Area.

Solid potassium permanganate is mixed with silica sand and emplaced as a slurry via hydraulic delivery methods. The sand/permanganate slurry has a much higher hydraulic conductivity than the surrounding soil matrix. This zone of high conductivity “draws” groundwater preferentially toward the emplaced permanganate/sand structure. Contaminants in groundwater that migrate through the zone of solid potassium permanganate are then oxidized/destroyed. Also, the potassium permanganate dissolves into the groundwater in the surrounding formation and creates an “oxidative plume” via advection and dispersion. The permanganate will continue to oxidize chemicals until the oxidative capacity is exhausted.

Pilot testing and additional data collection in the Northern Area would be conducted while ERH is taking place at the NAPL/TCE source area. Implementation of ISCO via emplacement of solid permanganate is estimated to take eight to ten months to complete from the notice to proceed. The time to achieve the RAO is estimated to take two to three years after emplacement of the solid potassium permanganate. The estimated cost to implement ISCO in the expanded Northern Area including pre-remediation sampling, performance of a pilot test, drilling, one primary emplacement event of solid permanganate and one polishing step is $4,300,000.

2.10 COMPARATIVE ANALYSIS OF ALTERNATIVES

As part of the remedy selection process, EPA evaluates each proposed remedy against the nine criteria specified in the National Contingency Plan (NCP), 40 CFR §300.430(e)(9)(iii). The selected alternative must satisfy the threshold criteria set out in the NCP. Next, the primary balancing criteria are used to weigh the tradeoffs or advantages and disadvantages of each of the alternatives. The modifying criteria, which are state and community acceptance, are evaluated at the end of the public comment period. This section of the ROD

summarizes the nine criteria and the relative performance of each alternative against the nine criteria, noting whether each satisfies the threshold criteria, how each compares with the no action alternative, and whether the state and community support the alternative. A comparative analysis of the alternatives presented above using the nine evaluation criteria follows.

For additional information on the comparison of the remedial alternatives, refer to the FSS Report and FFS Addendum, which are part of the Administrative Record.

Threshold Criteria *- The first two Superfund criteria are known as "threshold criteria" because they are the minimum requirements that each response measure must meet in order to be eligible for selection as a remedy.*

2.10.1 Overall Protection of Human Health and the Environment

"Overall protection of human health and the environment" evaluates whether an alternative eliminates, reduces, or controls threats to public health and the environment through institutional controls, engineering controls, or treatment.

The No-Action alternatives do not provide for overall protection of human health and the environment. For this reason, the No-Action alternatives are not discussed further in this section.

The other alternatives considered do comply with this threshold criteria, with varying degrees. Among the NAPL/TCE source area alternatives, Alternative 3 (ERH) provides the highest level of protection of human health and the environment. This would be followed by Alternative 4 (ISCO) and Alternative 5 (surfactant flooding). Alternative 2 (MPE) is not considered protective of human health and the environment, as it will not meet the RAO. Among the expanded Northern Area alternatives, Alternative 2 (ERH) is considered to provide the highest level of protection, as the technology has demonstrated contaminant removal levels greater than 99 percent.

2.10.2 Compliance with ARARs

Section 121-(d) of CERCLA and Part 300.430(f)(1)(ii)(B) of the NCP require that remedial actions at CERCLA sites at least attain legally applicable or relevant and appropriate federal and more stringent state requirements, standards, criteria and limitations which are collectively referred to as "ARARs," unless such ARARs are waived under CERCLA Section 121(d)(4). "Compliance with ARARs" addresses whether a remedy will meet all of the applicable or relevant and appropriate requirements of other federal and state environmental statutes or provide a basis for invoking a waiver.

Because this is an Interim Remedial Action, EPA is waiving certain ARARs. CERCLA Section 121(d)(4)(A) and Part 300.430(f)(1)(ii)(C)(1) of the NCP allows EPA to select a remedy that does not meet an ARAR if the remedy is an interim measure that will eventually be part of a remedial action that will meet the ARAR. For example, a groundwater remedy in an area where the groundwater is considered a drinking water resource would usually be required to restore the groundwater until it attains the chemical-specific TCE drinking water standard (North Carolina Groundwater Quality Standard) of 3 parts per billion. The chemical-specific ARARs will apply to the final site-wide ROD for the site. This Interim Remedial Action will instead be measured by achievement of the RAO, a 95 reduction of TCE concentration in the 3.1-acre treatment area.

The other ARARs associated with this Interim Action ROD are "Action-specific" and "Location-specific" ARARs, with which the Interim Remedial Action will comply. A complete list of these ARARs are attached as Tables 1 and 2. With the exception of the No-Action alternatives, all of the evaluated alternatives would be compliant with the ARARs listed in Tables 1 and 2.

Primary Balancing Criteria *- The next five Superfund criteria, three through seven, are known as "primary balancing criteria." These five criteria are factors with which tradeoffs between response measures are assessed so that the best option will be chosen, given site-specific data and conditions.*

2.10.3 Long-Term Effectiveness and Permanence

"Long-term effectiveness and permanence" considers the ability of an alternative to achieve long-term, effective and permanent protection of human health and the environment over time.

The ERH alternatives would have the highest level of long-term effectiveness and permanence, as a significant portion of the NAPL and TCE mass can be permanently destroyed with limited contaminant "rebound" expected. The ISCO alternatives have also proven successful at other similar applications, although polishing steps are frequently required to deal with residual concentration levels.

2.10.4 Reduction in Toxicity, Mobility, or Volume Through Treatment

"Reduction in toxicity, mobility, or volume (TMV) of contaminants through treatment" evaluates an alternative's use of treatment to reduce the harmful effects of principal contaminants, their ability to move in the environment and the amount of residual contamination present after treatment.

The ERH alternatives have a higher probability of reducing the TMV of contaminants, as the electrical current creating the heat is not affected by low permeability zones, and thus the entire saturated treatment zone is heated uniformly. With the ISCO alternatives, the oxidant must directly contact the NAPL/TCE for the contaminant to be destroyed. However, the oxidative plumes created via the emplaced potassium permanganate slurry are expected to contact the large majority of the treatment zone. Where monitoring might indicate a particular area is not receiving adequate treatment, additional emplacements could easily be installed. Multi-Phase Extraction and Surfactant Flushing provide much lower reduction in TMV of NAPL and TCE.

2.10.5 Short-Term Effectiveness

"Short-term effectiveness" considers the short-term risk or impact to the community, on-site workers and the environment that may be posed during the construction and implementation of the alternative. All of the alternatives considered can be managed properly to minimize disruption(s) to the community and to provide for adequate protection of on-site workers and the community during construction/implementation.

2.10.6 Implementability

"Implementability" addresses the technical and administrative feasibility of alternative, including the availability of materials and services needed to implement that remedy. All of the alternatives considered are technically and administratively implementable. Pilot tests would be necessary for the ISCO alternatives and surfactant flushing to design full-scale systems.

2.10.7 Cost

"Cost" includes estimated capital and annual operation and maintenance (O&M) costs, as well as present worth cost. Since this in an interim action, long-term O&M costs are not applicable. Rather, costs associated with the remediation time frames were incorporated into the present worth cost estimates provided herein. Present worth cost is the total cost of an alternative over time in terms of today's dollar value. Cost estimates are expected to

be accurate within a range of +50 to -30 percent. This is a standard assumption in accordance with EPA guidance.

The estimated costs of the NAPL/TCE source area remedial alternatives ranged from $2,670,000 (MPE) to $4,150,000 (ERH). ERH has the highest capital cost, but there is only one heating effort. ERH technology has the most certainty to achieve the RAO of 95 percent reduction of TCE concentrations. However, ISCO is about $300,000 less expensive and has demonstrated success at achieving the RAO in similar applications.

For the expanded Northern Area, the alternative costs ranged from $4,300,000 for ISCO to $8,700,000 for ERH. The operational costs for ERH (power to heat electrodes) and ISCO (oxidant and emplacement) are essentially the same. The significant difference in cost is primarily due to subsurface drilling requirements, and the deeper depth to bedrock in the Northern Area. For cost estimating purposes, ERH required 262 electrodes versus 59 cased borings for ISCO. In other words, ERH requires about four times more borings to bedrock than ISCO does in the Northern Area. Considering the depth to bedrock, relatively large treatment volume, and the fact that ERH is basically twice as expensive as ISCO for the Northern Area, ISCO is considered to be more cost-effective for the expanded treatment area.

Modifying Criteria *- The final two evaluation criteria, eight and nine, are called "modifying criteria" because new information or comments from the state or the community on the Proposed Plan may modify the preferred response measure or cause another response measure to be considered.*

2.10.8 State Agency Acceptance

"State/Support agency acceptance" considers whether the state and/or support agency concurs with, opposes, or has no comment on the Preferred Alternative.

The State of North Carolina concurs with the selected remedy identified in this Interim Action ROD (Appendix A).

2.10.9 Community Acceptance

"Community acceptance" considers whether the public agrees with, opposes, offers different alternatives, or has no comment on the Preferred Alternative described in the Proposed Plan. Comments received on the Proposed Plan are an important indicator of community acceptance.

As discussed in more detail below in Section 3.0 (Responsiveness Summary), EPA received substantial support from the community regarding the preference to maximize the effectiveness of the Interim Remedial Action and expand the treatment area and volume. Appendix B includes the verbatim transcript of the October 13, 2015 public meeting. Redacted copies of all public comments received during the 60-day public comment period are attached as Appendix C.

2.11 PRINCIPAL THREAT WASTES

The NCP establishes an expectation that EPA will use treatment to address the principal threats posed by a site wherever practicable (NCP § 300.430(a)(1)(iii)(A)). The "principal threat" concept is applied to the characterization of "source materials" at a Superfund site. A source material is material that includes or contains hazardous substances, pollutants or contaminants that act as a reservoir for migration of contamination to groundwater, surface water or air, or acts as a source for direct exposure. The EPA selected remedy described below in Section 2.12 does treat source materials in the 1.2-acre NAPL/TCE source area plus the 1.9-acre

expanded Northern Treatment Area. Therefore, this Interim Action ROD does satisfy the statutory preference for treatment of principal threat wastes.

2.12 SELECTED REMEDY

EPA has selected ERH to treat the 1.2-acre NAPL/TCE source area and ISCO to treat the 1.9-acre expanded Northern Area (total 3.1 acres). ERH will treat an estimated 47,250 CYs of saturated material, while ISCO will treat approximately 161,000 CYs of saturated material (total 208,250 CYs).

ERH in the NAPL/TCE Source Area

ERH will involve heating the subsurface using electrodes installed in the 1.2 acre zone of NAPL/TCE contamination. An alternating current voltage will be applied to the electrodes, which will generate an electric current. The electric current causes heating of the subsurface that will volatize the TCE. TCE vapors will be recovered from vent wells that are located adjacent to the electrodes. The vapors will then be treated aboveground and discharged to the atmosphere. Condensate from the vapors will also be collected and treated. The treated condensate will be used to provide "drip water" to the electrodes or will be discharged to the sanitary sewer system.

Heating occurs in the saturated zone where there is sufficient moisture to conduct electricity. Temperature monitoring points will be installed at multiple depths to monitor the target temperature in the subsurface. Borings for the electrodes will be installed using hollowstem augers. Borings will be advanced to top of bedrock (e.g auger refusal) and the electrode and vent well installed. It is estimated that up to 200 electrodes and co-located vent wells will be installed in ERH treatment area.

The ERH bench test conducted during implementation of the FFS effort indicated that ERH could reduce TCE concentrations up to 99 percent. Therefore, EPA has a high degree of confidence that ERH can achieve the RAO of 95% reduction of TCE concentration in saturated soil, NAPL, and groundwater. Implementation of ERH in the 1.2-acre source zone is expected to take 19 to 21 months, with an estimated five months of subsurface heating. A pre-treatment and post-treatment sampling and analysis plan will be developed to determine when a 95% reduction of TCE has been achieved. The heating effort will continue until treatment effectiveness monitoring indicates the RAO has been achieved.

ERH is safe to site workers and the community, as ERH work is performed with numerous safeguards. Isolation transformers allow electricity to flow only between electrodes within the work area. Thus, electricity cannot travel beyond the ERH treatment area. Monitoring and engineering controls will be implemented to protect workers and the community. Engineering controls will be used to prevent contaminated materials from migrating with surface water runoff or becoming airborne during construction. Air monitoring will be implemented during construction activities that come into contact with contaminated media to ensure workers wear the proper protective equipment for the level of contamination present. Air and wastewater discharge monitoring will also be implemented to ensure that contaminants being discharged do not exceed applicable standards and are protective of the surrounding community.

The cost to implement ERH in the 1.2-acre NAPL/TCE source area is estimated at $4,735,000. The cost estimate for ERH from the FFS Report is provided below for reference. The actual ERH implementation cost will be refined during the Request for Proposal (RFP) stage.

Estimate of Costs for Electrical Resistivity Heating
CTS of Asheville, Inc. Superfund Site
Asheville, North Carolina
Amec Foster Wheeler Project 6252-12-0006

Item	Estimated Cost	Comment/Assumtion
Design, work plan	$175,000	
Monitoring well installation	$80,000	10 monitoring well pairs (stainless steel)
Pre-remediation sampling/analysis	$30,000	sample soil, LNAPL, and groundwater
Mobilization of electrode materials	$595,000	
Drilling	$650,000	157 co-located electrodes and vent wells; 18 temperature monitoring points; includes waste disposal
Subsurface installation/oversight	$245,000	
Surface installation and start-up	$430,000	
System operation	$1,800,000	5 months of heating
Confirmation sampling	$40,000	includes sampling during remediation
Demobilization and well abandonment	$105,000	does not include abandonment of monitoring wells to be used in future monitoring
Total estimated cost	**$4,150,000**	

Note: This cost table does not include the additional 0.21 acres and 6,750 CYs of volume added to the NAPL/TCE source area in the FFS Addendum. The total NAPL/TCE source area to remediated by ERH is now 1.2 acres. The total volume to be remediated by ERH is 47,250 CYs. The cost to treat the additional area via ERH is $585,000. Therefore, the total cost to treat the 1.2-acre NAPL/TCE source via ERH is $4,735,000.

ISCO in the Expanded Northern Area

ISCO will be employed to treat TCE impacted groundwater in the expanded 1.9-acre Northern Area. ISCO will involve emplacement of oxidant chemical substances into the contaminated zones of the treatment area to breakdown the TCE. As discussed in Section 2.9.2, the FFS Addendum selected solid potassium permanganate as the oxidant since it has a greater oxidation capacity than the liquid form.

Solid potassium permanganate will be mixed with silica sand and emplaced as a slurry via hydraulic delivery methods. Depending on the soil characteristics and the amount of oxidant required, the emplaced slurry is typically less than an inch thick and has a radius ranging from 15 to 25 feet from the emplacement point. The sand/permanganate slurry has a much higher hydraulic conductivity than the surrounding soil matrix. This zone of high conductivity creates a preferential flow pathway toward the oxidant. TCE contaminated groundwater will migrate through the zone of solid potassium permanganate and become oxidized/destroyed. Also, the potassium permanganate dissolves into the groundwater in the surrounding formation and creates an oxidative plume via advection and dispersion. The permanganate will continue to oxidize chemicals until the oxidative capacity is exhausted.

Solid polyvinyl chloride (PVC) casings will be installed to the depth of refusal using sonic drilling techniques. An eight-inch diameter borehole will be created, a four-inch casing installed, and the annulus of the boring backfilled with cement grout. Once the cement grout has fully cured, the PVC casing will be cut using a high-pressure jetting tool at specified intervals. The solid potassium permanganate will be mixed with sand and a small amount of bentonite will be added to keep the solids in suspension during emplacement. The permanganate/sand slurry will be emplaced via hydraulic delivery methods. A packer system will be used to isolate the emplacement interval. The permanent casings allow for subsequent reagent emplacements or injection of water or other amendments to the existing emplacements, if necessary. For cost estimating

purposes, it was assumed that 59 borings would be installed in the Northern Area, spaced 30 to 40 feet apart. It was also assumed that each boring would receive four to six emplacements in the targeted zones.

ISCO has proven successful in achieving TCE reductions greater than 95 percent at other sites with similar subsurface conditions. After ERH in the NAPL/TCE source area, much lower concentrations of dissolved-phase VOCs will migrate to the Northern Area. The potassium permanganate present in the Northern Area will be available to provide additional, ongoing treatment for this migrating groundwater. Concentrations of TCE in the downgradient, dissolved-phase plume discharge zones east and west of the site would be expected to decline after implementation of ERH and ISCO. Implementation of ISCO via emplacement of solid permanganate is estimated to take eight to 10 months. The time to reach the RAO is estimated to take two to three years after the initial treatment event. As with any injection/emplacement project, it is expected that some areas in the Northern Area will require additional treatment. A pre-treatment and post-treatment sampling and analysis plan will be developed to verify that the RAO has been achieved. Additional emplacement events will be conducted until the RAO is achieved, or an alternate strategy is developed.

Permanganate can migrate beyond the emplacement location. A contingency plan will be developed to ensure the permanganate does not discharge to the eastern and western spring areas. Contingency monitoring wells will be installed between the Northern Area and the discharge zones and the oxidation reduction potential (ORP) of the groundwater will be monitored. Significant increases in ORP or visual presence of permanganate in a well are indicative that permanganate is migrating. If such conditions are identified, control measures will be implemented to neutralize the groundwater before it reaches the surface water discharge zones.

Monitoring and engineering controls will be implemented to protect workers and the surrounding community. Engineering controls will be used to prevent contaminated materials from migrating with surface water runoff or becoming airborne during construction. Air monitoring will be conducted during construction activities that come into contact with contaminated media to ensure workers wear the proper protective equipment for the level of contamination present.

From a construction sequencing perspective, ERH in the 1.2-acre NAPL/TCE area will occur first. While the ERH work proceeds, additional data will be collected in the Northern Area to better characterize the horizontal and vertical extent of contamination in the overburden. This data will aid in identifying potential “hot spots” and refine the area and volume of the treatment zone for full-scale system design. Pilot testing will also be conducted at this time. Pilot testing will determine the radius of influence of the emplaced slurry, evaluate the amount of oxidant required, and evaluate contaminant reductions in nearby monitoring wells. ISCO in the Northern Area will start when ERH is completed and a contract has been awarded for the ISCO full-scale design.

EPA anticipates that the Interim Remedial Action will lead to decreasing TCE concentration trends in the bedrock aquifer. It is important to establish a good baseline of the “pre-treatment” quality of the bedrock aquifer conditions. For that reason, a bedrock aquifer monitoring plan will be developed and implemented concurrent with the Interim Action source control work.

The cost to implement ISCO in the 1.9-acre Northern Area is estimated at $4,300,000. The cost estimate for ISOC from the FFS Addendum is provided below for reference. The actual ISCO implementation cost will be refined after additional data collection, the pilot test, and during the Request for Proposal (RFP) stage. The total estimated cost to implement EPA’s selected remedy as described in this section is $9,035,000.

Estimate of Costs for In-situ Chemical Oxidation for the Northern Area
CTS of Asheville, Inc. Superfund Site
Asheville, North Carolina
Amec Foster Wheeler Project 6252-12-0006

Item	Estimated Cost	Comment/Assumtion
Monitoring well installation	$60,000	10 monitoring well pairs (PVC)
Pre-remediation sampling/analysis	$10,000	sample groundwater from monitoring wells
Pilot test	$160,000	
Full-scale design	$20,000	
Casing installation	$400,000	59 cased borings; includes waste disposal (cuttings from below the water table are considered hazardous)
Reagent (solid potassium permanganate)	$1,330,000	
Reagent emplacement	$1,850,000	286 emplacements, oversight, equipment
Contingency monitoring	$20,000	monitor oxidation reduction potential between remediation area and discharge zones
Confirmation sampling	$20,000	includes sampling during remediation
Additional reagent emplacement	$400,000	one additional treatment, as needed based on monitoring.
Casing abandonment and documentation	$30,000	does not include abandonment of monitoring wells to be used in future monitoring
Total estimated cost	**$4,300,000**	

2.13 STATUTORY DETERMINATIONS

Based on the information currently available, EPA believes the selected alternative for this Interim Remedial Action meets the Threshold Criteria and provides the best balance of tradeoffs among the other alternatives with respect to the Balancing and Modifying Criteria. EPA expects the selected remedy to satisfy the following statutory requirements of CERCLA Section 121(b):

- Be protective of human health and the environment;
- Comply with all ARARs unless a waiver is justified under CERCLA Section 121(d)(4);
- Be cost effective, and;
- Use permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable.

2.13.1 Protection of Human Health and the Environment

The selected Interim Remedial Action is a source control action that protects human health and the environment by reducing TCE concentrations by 95% and by removing a known source of groundwater contamination. Previous removal actions have been implemented for drinking water supply and for ambient air emissions at the eastern springs area. The final "site-wide" ROD will address any remaining unacceptable risks posed to human health and the environment posed by residual NAPL/TCE mass in the subsurface not addressed by this Interim Remedial Action.

2.13.2 Compliance with ARARs

This interim remedy will comply with the "Action-specific" and "Location-specific" ARARs listed in Tables 1 and 2, respectively. However, because this in an Interim Remedial Action, EPA is waiving the "chemical-specific" ARARs. Part 300.430(f)(1)(ii)(C)(1) of the NCP allows EPA to select a remedy that does not meet an ARAR if the remedy is an interim measure that will eventually be part of a remedial action that will meet the ARAR. Chemical-specific ARARs will apply to the final "site-wide" ROD. This Interim Remedial Action will instead be measured by achievement of the RAO, a 95 reduction of TCE concentration in the 3.1-acre treatment area.

2.13.3 Cost Effectiveness

EPA has determined that the selected remedy is cost-effective and that the overall protectiveness of the remedy is proportional to the overall cost. As specified 40 CFR §300.430(f)(1)(ii)(D), the cost-effectiveness of the Selected Remedy was assessed by comparing the protectiveness of human-health and the environment in relation to three balancing criteria (i.e., long-term effectiveness and permanence; reduction in toxicity, mobility, and volume; and short-term effectiveness) with the other alternatives considered.

2.13.4 Utilization of Permanent Solutions and Alternative Treatment (or Resource Recovery) Technologies to Maximum Extent Practicable

EPA has determined that the selected Interim Remedial Action represents the maximum extent to which permanent solutions and treatment technologies can be utilized in a practical manner at this portion of the site. The selected interim source control remedy is protective of human health and the environment, complies with ARARs (except "chemical specific" ARARs). EPA has determined that the selected Interim Remedial Action provides the best balance of trade-offs in terms of the five balancing criteria, while also considering the preference for treatment as a principal element, as well as state and community acceptance. The selected remedy employs ERH and ISCO to treat known source materials to achieve a 95% reduction in TCE concentrations thereby achieving long-term effectiveness.

2.13.5 Preference for Treatment as a Principal Element

The Interim Remedial Action employs ERH to treat the 1.2-acre NAPL/TCE source area, and ISCO to treat the 1.9-acre Northern Area. By utilizing treatment as a significant portion of the selected remedy, which will greatly reduce the volume of TCE mass, the statutory preference for remedies that employ treatment as a principal element is satisfied. Such treatment will also reduce the overall toxicity and mobility by significantly removing TCE mass that is serving as a source of dissolved phase groundwater contamination.

2.13.6 Five-Year Review Requirements

The NCP §300.430(f)(4)(ii) requires a Five-Year Review if the remedial action results in hazardous substances, pollutants, or contaminants remaining on-site above levels that allow for unlimited use and unrestricted exposure. Therefore, a Five-Year Review will be conducted within five years after initiation of the Interim Remedial Action to ensure that the remedy is, or will be, protective of human health and the environment.

2.14 DOCUMENTATION OF SIGNIFICANT CHANGES

EPA's October 2015 Proposed Plan identified ERH as the preferred alternative for the one-acre NAPL/TCE source area. However, EPA indicated in the Proposed Plan that it was: (1) evaluating the feasibility of expanding the Interim Remedial Action treatment area to include TCE mass in the groundwater north of there,

near monitoring well clusters MW6/MW7; and (2) considering ISCO as one of the remedial alternatives that satisfied all of the statutory requirements of CERCLA.

This Interim Action ROD selects a remedy that expands the area and volume to be treated and adds ISCO as the method of treatment for the expanded area. Section 117(b) of CERCLA requires EPA to document in the ROD any significant changes between the remedy proposed in the Proposed Plan and the remedy selected in the ROD. That same section of the law requires EPA to consider whether the public could have reasonably anticipated those changes. For this interim remedy, the public not only could have anticipated the changes, but the public was one of the driving forces behind the changes.

As discussed below in Section 3.0, EPA received overwhelming support from the community regarding the preference to maximize the effectiveness of the Interim Remedial Action by expanding the treatment area and volume. Based on that response, EPA requested that CTS evaluate remediation strategies for the expanded Northern Area during the 30 day extension to the initial public comment period. CTS agreed and submitted a FFS Addendum that evaluated ERH and ISCO remediation strategies for the expanded 1.9-acre Northern Area.

The biggest difference between the remedies described in the October 2015 Proposed Plan and the February 2016 Interim Action ROD is that EPA has added ISCO to the interim remedy to treat approximately 161,000 CYs of saturated material in the 1.9 acre Northern Area. Groundwater in the Northern Area contains concentrations of TCE ranging from hundreds of parts per billion to tens of thousands parts per billion. As noted during the NAPL investigation, concentrations of TCE vary horizontally and vertically in groundwater in the Northern Area. The one significant advantage ISCO has over ERH, is the ability to isolate and treat those more permeable layers with "hot spots" of TCE. As discussed in Section 2.10.7, the cost of ERH in the Northern Area is more than double the cost to implement ISCO (e.g. $8.7 Million vs. $4.3 Million). EPA selected ISCO for the Northern Area because it has demonstrated success in achieving the RAO and is more cost-effective than ERH. ERH remains a component of the interim remedy to treat the 1.2-acre NAPL/TCE source area.

This decision represents a threefold increase in the area and a fivefold increase in the volume of material to be treated via the Interim Remedial Action. While this more than doubles the initial cost of the interim remedy (e.g. $4.15 million to $9.035 million), EPA strongly believes the "now versus later" remediation approach is more cost-effective in the long-term and will expedite the site-wide cleanup. Furthermore, this expansion was contemplated in the Proposed Plan, discussed extensively at the public meeting, and overwhelmingly supported by the public.

3.0 THE RESPONSIVENESS SUMMARY

This Responsiveness Summary is required by Section 117 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, more commonly known as Superfund) and Sections 300.430(f)(3)(i)(F) and 300.430(f)(5)(iii)(B) of the National Contingency Plan (NCP). This section of the ROD provides a summary of comments received from the public, the North Carolina Department of Environmental Quality (Support Agency) and from the CTS Corporation (Potentially Responsible Party). It also documents for the record how public comments were integrated into the remedy decision making process for the site.

EPA released the Proposed Plan for Interim Remedial Action to the public on September 30, 2015 and held the initial 30 day public comment period from October 1 through October 30, 2015. EPA sponsored a public meeting on October 13, 2015, at the T.C. Roberson High School Auditorium to present the details of the Proposed Plan. The meeting started just after 6:00pm and concluded at approximately 8:41pm. An estimated 60 people attended the public meeting. The verbatim transcript of the October 13th public meeting is included as Appendix B to this Interim Action ROD.

Near the end of the initial 30-day public comment period, EPA noted that the majority of comments received encouraged EPA to expand the proposed one-acre treatment area to include additional acreage to the north near monitoring well clusters MW6 and MW7. EPA discussed the community's comments with representatives of CTS Corporation, and as a result, CTS requested a 30-day extension to the initial comment period. EPA agreed with this request and extended the public comment period an additional 30 days through November 29, 2015. During the extension, CTS prepared an Addendum to the Focused Feasibility Study (FFS) that evaluated Electrical Resistance Heating (ERH) and In-Situ Chemical Oxidation (ISCO) for the expanded treatment area north near MW6/MW7. On November 25, 2015, the FFS Addendum was submitted to EPA by Amec Foster Wheeler, on behalf of CTS Corporation.

Comments Received from the Community

During the 60-day period, a total of 108 public comments were submitted to Craig Zeller, EPA's Remedial Project Manager (RPM) in the Region 4 Superfund Division. Ninety-two comments were submitted via email, and the other 16 comments were received via regular U.S. Mail. Approximately 38 comments (≈ 35%) were received from people who live in close proximity to the CTS site. This subset includes two private property owners located immediately east and west of the site, residents of Southside Village/Southside Estates, and others who listed 28803 as their ZIP code. Redacted copies of all comments received during the 60 day public comment period are included as Appendix C to this Interim Action ROD.

EPA received comments from several federal, state and local elected officials. United States Congressman Patrick McHenry provided written comments in a letter dated October 21, 2015. Heather McTeer Toney, EPA Region 4 Administrator, issued a formal written reply to Congressman McHenry on December 4, 2015. Mr. Terry Van Duyn, North Carolina State Senator from the 49th District (Buncombe County), provided written comments in correspondence dated October 28, 2015. Three Buncombe County Commissioners submitted comments to EPA; David Gantt, Chairman; as well as Miranda DeBruhl and Joe Belcher from the 3rd District. EPA also received comments from four community groups consisting of the POWER Action Group (TAG recipient), Clean Water for North Carolina, Physicians for Social Responsibility (Western NC Chapter), and Mountain True. All of this correspondence can be found in Appendix C of this Interim Action ROD.

In general, all but two of the comments received encouraged EPA to expand the scope of the proposed Interim Remedial Action to include the high concentrations of TCE in overburden groundwater near monitoring well clusters MW6/MW7. The two anomalies suggested that EPA "encapsulate the waste in bricks", or "dig up the whole 9 acres". EPA does not consider either of these alternatives to be effective and/or practical. The ≈ 98% of commenters in favor of expanding the treatment area cited many common themes behind that preference including:

- Expanding the treatment area with the Interim Remedial Action would be more cost-effective, would require less overall time, and would expedite beneficial re-use of the former CTS plant site;
- If not treated with the Interim Remedial Action, TCE in the overburden groundwater near MW6/MW7 will continue to migrate toward springs located east and west of the CTS site;
- EPA has taken too long to implement a comprehensive cleanup of the CTS site, and the community should not be asked to wait any longer. Implement an effective cleanup now, not later; and
- CTS has the resources to conduct a comprehensive cleanup via the Interim Remedial Action approach. EPA should use all its existing Superfund enforcement authority to expand the treatment area without further delay.

The community also presented a number of common questions regarding implementation of the Interim Remedial Action. These questions are listed below, followed by EPA's response:

Question: How will EPA ensure that the method is successful? What before and after measurements will EPA require?

Answer: The Remedial Action Objective (RAO) for this Interim Remedial Action is a 95% reduction of TCE concentrations in saturated soil, NAPL and groundwater. Pre-treatment concentrations of TCE in those media will be established as a baseline. Treatment via ERH and ISCO will continue until quantitative measurements indicate that the 95% TCE reductions have been achieved.

Question: What will be done if the method does not work as intended?

Answer: EPA has a high level of confidence in the efficacy of ERH. The subsurface heating effort between the observed water table and top of bedrock will be sustained until sampling and analysis indicates the RAO has been achieved. ISCO is also a proven remediation technology with success in reducing TCE in similar subsurface conditions. The primary injection event is often times not sufficient in reaching the desired TCE reductions. Follow-up, polishing injection event(s) will be conducted until the RAO is achieved. In the unlikely event that neither ERH or ISCO works sufficiently, EPA has the authority to amend this ROD to select a new or different remedy to address the risks posed by the contamination at the site.

Question: What will be done to make sure that the vaporized TCE does not escape and contaminate air in our community?

Answer: ERH is conducted under negative pressure so all vapors will be collected via recovery wells underground. The collected vapors will be treated aboveground before being discharged to the air. Perimeter air monitoring will be conducted on-site as a safeguard to ensure ambient air quality is not adversely impacted during remediation, which is important not only to nearby residents, but also to workers at the site.

Question: Where will the toxins extracted and separated out by this cleanup process be taken for disposal? Does the community have the opportunity to comment on the disposal location?

Answer: Any NAPL accumulation in the vent wells will be recovered and transported off-site for disposal. The disposal site has not been selected, and will not be determined until the Remedial Design phase. The disposal site will be an EPA approved facility that is permitted to receive this kind of waste. The community does not have the opportunity to comment on the off-site disposal location, but EPA will convey that information once a disposal location has been selected. Off-site transfers of CERCLA wastes must comply with the Off-Site Rule described in the NCP at 40 C.F.R. Part 300.440.

Question: Will EPA and CTS be able to keep investigating and characterizing the deeper areas of TCE while this interim action is going on? When will work begin on the site-wide remedy?

Answer: Yes, EPA plans to further study the deep bedrock issue concurrent with the TCE source control cleanup action in 2016. It is important to understand and document the baseline conditions of the deep-bedrock aquifer pre-treatment, as EPA expects the Interim Remedial Action will lead to decreasing concentration trends over time. Work on the site-wide remedy has already been initiated in the form of expediting the Western Area characterization effort.

Comments Received from CTS Corporation

Near the end of the initial 30-day comment period, EPA requested that CTS evaluate remedial alternatives for the high concentrations of TCE in groundwater located north near monitoring wells MW6/MW7. This request was based on technical review comments provided by EPA in August 2015 on the Draft FFS Report, as well as

public comments that encouraged EPA to expand the scope of the Interim Remedial Action. CTS agreed to conduct that evaluation and Amec

Foster Wheeler submitted the FFS Addendum to EPA on November 25, 2015. The FFS Addendum was distributed by EPA to the site community email list on December 3, 2015. The FFS Addendum is included in the Administrative Record.

The FFS Report Addendum evaluates the use of ERH and ISCO to treat the expanded area to the north near MW6/MW7. It is important to note that this expanded area more than doubles the one acre treatment area and 40,500 cubic yard (CY) volume proposed for ERH in the original Proposed Plan for Interim Remedial Action. The original one acre source area, and expanded treatment area to the north is shown on Figure 2 of the FFS Addendum. The area to be addressed by the FFS Addendum increased threefold from one acre to three acres, while the volume increased fivefold from 40,500 CYs to more than 200,000 CYs. The primary reason for the large volume increase is that the bedrock surface dips to the north and increases the saturated thickness to be treated. The estimated cost to treat the expanded area by ERH is $8.7 million, for a total cost of $13.435 million including the original area. The estimated cost to treat the expanded area by ISCO is $4.3 million, for a total cost of $9.035 million.

In Section 5.0 of the FFS Addendum, AMEC Foster Wheeler identifies ISCO as the preferred and recommended remedial alternative to address the expanded area to the north. Therefore, CTS proposed to use ERH to treat the original NAPL/TCE source area, and ISCO to treat the expanded area at an estimated cost of $9.035 million. EPA's response to comments received from CTS Corporation was to allow the additional 30 days for public comment, to consider the additional information provided, and ultimately to adopt the recommended alternative.

Comments from the North Carolina Department of Environmental Quality (NC DEQ)

The NCP requires EPA to consult with NC DEQ as the Support Agency for this Interim Remedial Action. NC DEQ has been regularly consulted and actively involved throughout this remedy selection process, and has reviewed all the supporting and relevant documentation related to the Interim Remedial Action. NC DEQ concurs with the expanded scope of the Interim Remedial Action that involves ERH treatment for the original FFS source area, followed by ISCO for the expanded Northern Area. A letter of concurrence from NC DEQ is attached as Appendix A.

Conclusion

EPA has considered the overwhelming support received from the community regarding the preference to maximize the effectiveness of the Interim Remedial Action and expand the treatment area and volume. EPA also acknowledges CTS's willingness to respond to the request from EPA and to comments received from the community by submitting a FFS Addendum that evaluated 2 remediation strategies for the expanded Northern Area. In consideration of the above, EPA has selected an expanded treatment alternative for the Interim Remedial Action that involves ERH for the 1.2-acre NAPL/TCE source area, plus ISCO for expanded treatment at the 1.9-acre Northern Area. Further details regarding the selected remedy can be found in Section 2.12 of the Interim Action ROD. Section 2.14 of the Interim Action ROD also provides an explanation of the differences between the original Proposed Plan and the expanded remedy EPA selected.

FIGURES

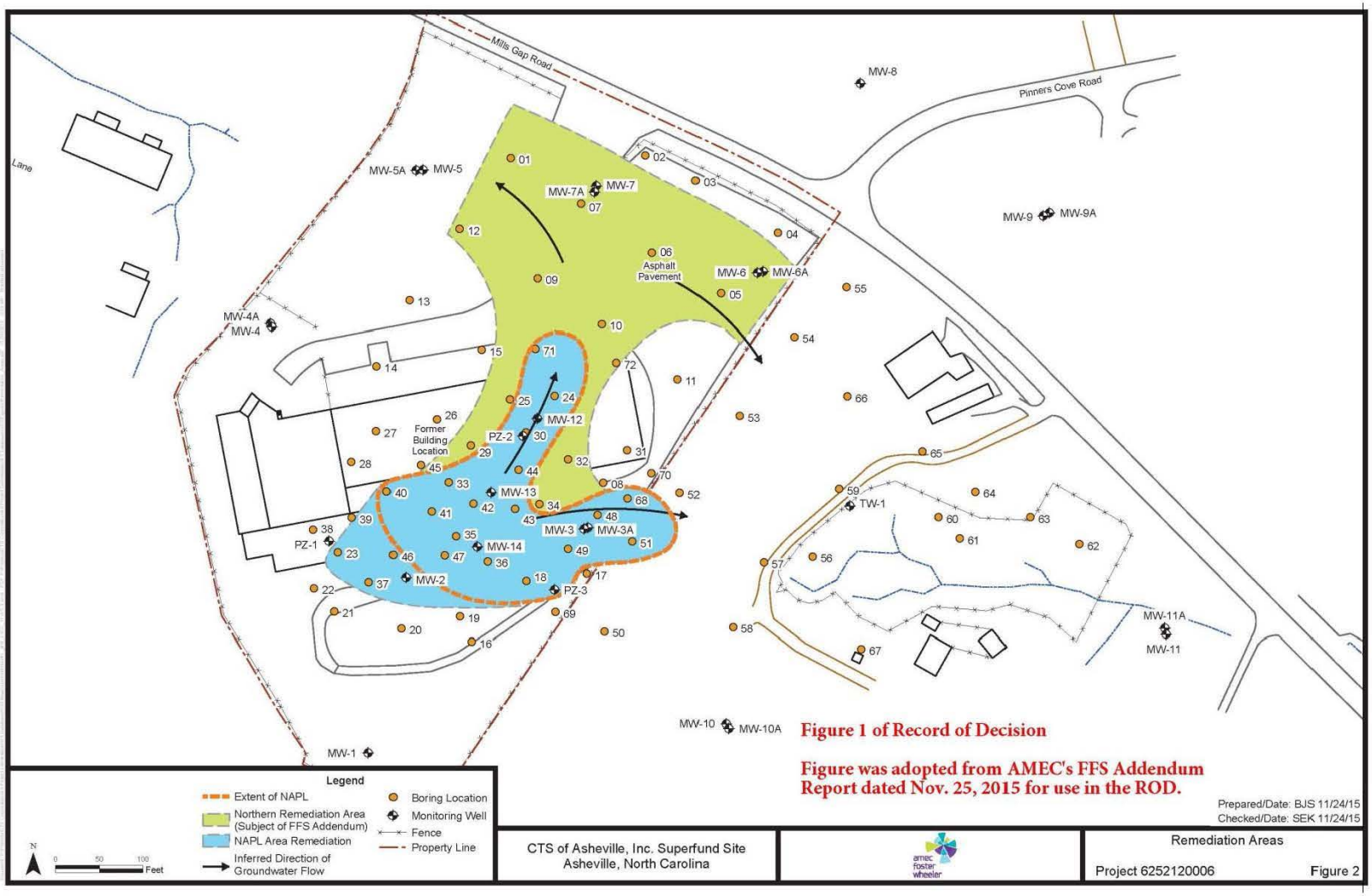


Figure 1 of Record of Decision

Figure was adopted from AMEC's FFS Addendum Report dated Nov. 25, 2015 for use in the ROD.

Prepared/Date: BJS 11/24/15
Checked/Date: SEK 11/24/15

TABLES

TABLE 1
Action-Specific ARARs
CTS of Asheville Inc. Superfund Site
Asheville, North Carolina

Action	Requirements	Prerequisite	Citation
General Construction Standards--All Land-Disturbing Activities (i.e., Excavation, Clearing, Grading)			
Managing fugitive dust emissions	Shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints, or visible emissions in excess of that allowed under paragraph (e) of this Rule.	Activities within facility boundary that will generate fugitive dust emissions--**relevant and appropriate**	15A NCAC 02D.0540(c)
	Implement methods (e.g. wetting dry soils and keeping roads clean of soil) to control dust emissions that could travel beyond the facility boundary.		15A NCAC 02D.0540(g)
Monitoring Well Installation and Operation			
Construction of groundwater monitoring well(s)	Shall not locate, construct, operate, or repair in any manner that may adversely impact the quality of groundwater.	Installation of wells (including temporary) other than for water supply--**applicable**	15A NCAC 02C.0108(a)
	Shall be located, designed, constructed, operated and abandoned with materials and by methods which are compatible with the chemical and physical properties of the contaminants involved, specific site conditions, and specific subsurface conditions.	**applicable**	15A NCAC 02C.0108(c)
	Monitoring well and recovery well boreholes shall not penetrate to a depth greater than the depth to be monitored or the depth from which contaminants are to be recovered. Any portion of the borehole that extends to a depth greater than the depth to be monitored or the depth from which contaminants are to be recovered shall be grouted completely to prevent vertical migration of contaminants.	**applicable**	15A NCAC 02C.0108(d)
	The well shall not hydraulically connect: (1) separate aquifers; or (2) those portions of a single aquifer where contamination occurs in separate and definable layers within the aquifer.	**applicable**	15A NCAC 02C.0108(e)

TABLE 1
Action-Specific ARARs
CTS of Asheville Inc. Superfund Site
Asheville, North Carolina

Action	Requirements	Prerequisite	Citation
	The well construction materials shall be compatible with the depth of the well and any contaminants to be monitored or recovered.	Installation of wells (including temporary) other than for water supply - **applicable**	15A NCAC 02C.0108(f)
	The well shall be constructed in such a manner that water or contaminants from the land surface cannot migrate along the borehole annulus into any packing material or well screen area.	**applicable**	15A NCAC 02C.0108(g)
	Packing material placed around the screen shall extend at least one foot above the top of the screen. Unless the depth of the screen necessitates a thinner seal, a one foot thick seal, comprised of chip or pellet bentonite or other equivalent material, shall be emplaced directly above and in contact with the packing material.	**applicable**	15A NCAC 02C.0108(h)
	Grout shall be placed in the annular space between the outermost casing and the borehole wall from the land surface to the top of the bentonite seal above any well screen or to the bottom of the casing for open end wells. The grout shall comply with Paragraph (e) of Rule .0107 of this Section except that the upper three feet of grout shall be concrete or cement grout.	**applicable**	15A NCAC 02C.0108(i)
	All wells shall be grouted within seven days after the casing is set. If the well penetrates any water-bearing zone that contains contaminated or saline water, the well shall be grouted within one day after the casing is set.	**applicable**	15A NCAC 02C.0108(j)
	Shall be secured with a locking well cap to ensure against unauthorized access and use.	**applicable**	15A NCAC 02C.0108(k)

TABLE 1
Action-Specific ARARs
CTS of Asheville Inc. Superfund Site
Asheville, North Carolina

Action	Requirements	Prerequisite	Citation
	Shall be equipped with a steel outer well casing or flush-mount cover, set in concrete, and other measures sufficient to protect the well from damage by normal site activities.	Installation of wells (including temporary) other than for water supply - **applicable**	15A NCAC 02C.0108(l)
	Any well that would flow under natural artesian conditions shall be valved so that the flow can be regulated.	**applicable**	15A NCAC 02C.0108(m)
	The well casing shall be terminated no less than 12 inches above land surface unless all of the following conditions are met: (1) site-specific conditions directly related to business activities, such as vehicle traffic, would endanger the physical integrity of the well; and (2) the well head is completed in such a manner so as to preclude surficial contaminants from entering the well.	**applicable**	15A NCAC 02C.0108(n)
	Shall have permanently affixed an identification plate. The identification plate shall be constructed of a durable, waterproof, rustproof metal or other equivalent material and shall contain the following information: (1) well contractor name and certification number; (2) date well completed; (3) total depth of well; (4) a warning that the well is not for water supply and that the groundwater may contain hazardous materials; (5) depth(s) to the top(s) and bottom(s) of the screen(s); and (6) the well identification number or name assigned by the well owner.	**applicable**	15A NCAC 02C.0108(o)

TABLE 1
Action-Specific ARARs
CTS of Asheville Inc. Superfund Site
Asheville, North Carolina

Action	Requirements	Prerequisite	Citation
	Shall be developed such that the level of turbidity or settle able solids does not preclude accurate chemical analyses of any fluid samples collected or adversely affect the operation of any pumps or pumping equipment.	Installation of wells (including temporary) other than water supply wells - **applicable**	15A NCAC 02C.0108(p)
	Shall be constructed in such a manner as to preclude the vertical migration of contaminants within and along the borehole channel.	**applicable**	15A NCAC 02C.0108(s)
Implementation of groundwater monitoring system	Shall be constructed in a manner that will not result in contamination of adjacent groundwaters of a higher quality.	Installation of monitoring system to evaluate effects of any actions taken to restore groundwater quality, as well as the efficacy of treatment--**applicable**	15A NCAC 02L.0110(b)
Maintenance of groundwater monitoring well(s)	Every well shall be maintained by the owner in a condition whereby it will conserve and protect groundwater resources, and whereby it will not be a source or channel of contamination or pollution to the water supply or any aquifer.	Installation of wells (including temporary wells) other than for water supply--**applicable**	15A NCAC 02C.0112(a)
	All materials used in the maintenance, replacement, or repair of any well shall meet the requirements for new installation.	**applicable**	15A NCAC 02C.0112(c)
	Broken, punctured, or otherwise defective or unserviceable casing, screens, fixtures, seals, or any part of the well head shall be repaired or replaced, or the well shall be abandoned pursuant to 15A NCAC 02C .0113.	**applicable**	15A NCAC 02C.0112(d)

TABLE 1
Action-Specific ARARs
CTS of Asheville Inc. Superfund Site
Asheville, North Carolina

Action	Requirements	Prerequisite	Citation
	No well shall be repaired or altered such that the outer casing is completed less than 12 inches above land surface. Any grout excavated or removed as a result of the well repair shall be replaced in accordance with Rule15A NCAC 02C.0107(f).	**applicable**	15A NCAC 02C.0112(f)
Underground Injection Well Installation and Operation			
Construction of injection well(s) for in-situ treatment of groundwater	Shall not be constructed, operated, maintained, converted, plugged, abandoned, or conducted in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water if the presence of that contaminant may cause a violation of any applicab+B32le groundwater quality standard specified in Subchapter 02L or may otherwise adversely affect human health.	Installation of a Class 5 underground injection well (In-Situ Groundwater Remediation Well)-- **applicable**	40 CFR § 144.12 15A NCAC 02C.0211(c)
	Shall follow the procedures, methods, specified materials, and requirements specified in the subparagraphs 3 through 24 of this Rule.	**applicable**	15A NCAC 02C.0225(g)(3) - (24)
Location of injection well(s) for in-situ treatment of groundwater	Shall not be located in an area generally subject to flooding. Areas which are generally subject to flooding include those with concave slope, alluvial or colluvial soils, gullies, depressions, and drainage ways.	Installation of a Class 5 underground injection well (In-Situ Groundwater Remediation Well)-- **applicable**	15A NCAC 02C.0225(g)(1)
Injection of substances into underground well	Groundwater remediation wells used to inject additives, treated groundwater, or ambient air for treatment of contaminated soil or groundwater may inject only additives determined by Department of Health and Human services not to adversely affect human health.	Injection of fluids into or air into an underground well for the purposes of groundwater remediation-- **applicable**	15A NCAC 02C .0225(a)

TABLE 1
Action-Specific ARARs
CTS of Asheville Inc. Superfund Site
Asheville, North Carolina

Action	Requirements	Prerequisite	Citation
	Rule requirements for other wells shall be treated as one of the injection well types in Rule .0209(5)(b) that most closely resembles the well equivalent hydrogeologic complexity and potential to adversely affect groundwater quality. The Director may permit by rule the emplacement or discharge of a fluid or solid into the subsurface for any activity that meets the definition of an "injection well" that the Director determines not to have the potential to adversely affect groundwater quality and does not fall under other rules in this Section.	Injection of substances into an underground well other than liquids or air—**relevant and appropriate**	15A NCAC 02C.0230
Reinjection of treated contaminated groundwater	Wells are not prohibited if injection is approved by EPA or a State pursuant to provisions for cleanup of releases under CERCLA or RCRA as provided in the CERCLA document.	Class IV wells [as defined in 40 CFR § 144.6(d)] used to re-inject treated contaminated groundwater into the same formation from which it was drawn – **relevant and appropriate**	40 CFR § 144.13(c) RCRA § 3020(b)
Injection zone determination	Shall specify the horizontal and vertical portion of the injection zone within which the proposed injection activity shall occur based on the hydraulic properties of that portion of the injection zone specified. No violation of groundwater quality standards specified in Subchapter 02L resulting from the injection shall occur outside the specified portion of the injection zone as detected by a monitoring plan approved by the Division.	Installation of groundwater remediation wells (other than permitted by Rule) for injection of additives--**applicable**	15A NCAC 02C.0225(e)(2)

TABLE 1
Action-Specific ARARs
CTS of Asheville Inc. Superfund Site
Asheville, North Carolina

Action	Requirements	Prerequisite	Citation
Mechanical integrity of wells	All permanent injection wells require tests for mechanical integrity, which shall be conducted in accordance with Rule .0207 of this Section. An injection well has internal mechanical integrity when there is no leak in the casing, tubing, or packer. An injection well has external mechanical integrity when there is no fluid movement into groundwaters through vertical channels adjacent to the injection well bore.	Installation of groundwater remediation wells (other than permitted by Rule) for injection of additives--**applicable**	15A NCAC 02C.0225(h); 15A NCAC 0207(a) and (b)
Operating an injection well(s) for in-situ treatment of groundwater	Pressure at the well head shall be limited to a maximum which will ensure the pressure in the injection zone does not initiate new fractures or propagate existing fractures in the injection zone, initiate fractures in the confining zone, or cause the migration of injected or formation fluids outside the injection zone or area.	**applicable**	15A NCAC 02C.0225(i)(1)
	Injection between the outermost casing and the well borehole is prohibited.	**applicable**	15A NCAC 02C.0225(i)(2)
Operation and maintenance of treatment system	Shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used. Proper operation and maintenance includes effective performance and adequate laboratory and process controls, including appropriate quality assurance procedures.	Operation of a well for injection of additives or groundwater underground – **applicable**	15A NCAC 02C .0211(k)

TABLE 1
Action-Specific ARARs
CTS of Asheville Inc. Superfund Site
Asheville, North Carolina

Action	Requirements	Prerequisite	Citation
Monitoring of injection wells	Monitoring wells shall be of sufficient quantity and location so as to detect any movement of injection fluids, injection process byproducts or formation fluids outside the injection zone as determined by the applicant in accordance with Subparagraph (e)(2) of this Rule. The monitoring schedule shall be consistent with the proposed injection schedule, pace of the anticipated reactions, and rate of transport of the injectants and contaminants. NOTE: The Monitoring will be specified in a monitoring plan included as part of a CERCLA document (e.g., Remedial Design or Remedial Action Work Plan).	Installation of groundwater remediation wells (other than permitted by Rule) for injection of additives--**applicable**	15A NCAC 02C.0225(e)(9)
	If affected, may require additional monitor wells located to detect any movement of injection fluids, injection process byproducts, or formation fluids outside the injection zone as determined by the applicant in accordance with Subparagraph (e)(2) of this Rule. If the operation is affected by subsidence or catastrophic collapse, the monitoring wells shall be located so that they will not be physically affected and shall be of an adequate number to detect movement of injected fluids, process byproducts, or formation fluids outside the injection zone or area.	Installation of monitoring wells in (or adjacent to) the injection zone that may be affected by injection operations – **applicable**	15A NCAC 02C.0225(j)(3)
Abandonment of Wells			
Abandonment of groundwater monitoring well(s) and injection wells	Shall be abandoned in accordance with the requirements of 15A NCAC 02C .0113(b)(1) and (2).	Permanent abandonment of water supply wells (including temporary wells)--**applicable**	15A NCAC 02C.0113(b)

TABLE 1
Action-Specific ARARs
CTS of Asheville Inc. Superfund Site
Asheville, North Carolina

Action	Requirements	Prerequisite	Citation
	Shall be abandoned by completely filling with a bentonite or cement-type grout.	Permanent abandonment of wells (including temporary wells) other than for water supply--**applicable**	15A NCAC 02C.0113(d)(2)
	All wells shall be permanently abandoned in which the casing has not been installed or from which the casing has been removed, prior to removing drilling equipment from the site.	Permanent abandonment of wells (including temporary wells) other than for water supply--**applicable**	15A NCAC 02C.0113(f)
Control of Diffuse VOC Emissions from Groundwater Treatment			
Emissions of VOCs from groundwater treatment (e.g., sparging system)	Shall not emit any of the toxic air pollutants listed in the table of the Rule in such quantities that may cause or contribute beyond the premises (adjacent property boundary) to any significant ambient air concentration that may adversely affect human health.	Emissions of toxic air pollutants (e.g., VOCs) from facility into the ambient air--**applicable**	15A NCAC 02D.1104
	Shall install and operate reasonable available control technology to limit emissions of VOCs.	Air emissions of VOCs from facilities where there is no other applicable emissions control rule--**relevant and appropriate**	15A NCAC 02D.0951(c)
	One of the applicable test methods in Appendix M in 40 CFR part 51 or Appendix A in 40 CFR Part 60 shall be used to determine compliance with VOC emission standards.	VOC emission source not covered by 15A NCAC 02D.2613(b) through (e)--**relevant and appropriate**	15A NCAC 02D.2613(g)

TABLE 1
Action-Specific ARARs
CTS of Asheville Inc. Superfund Site
Asheville, North Carolina

Action	Requirements	Prerequisite	Citation
Emission limitations for process vents used in treatment of VOC contaminated groundwater	Shall meet the requirements under one of the options specified below: • Reduce from all affected process vents the total emissions of the HAP to a level less than 1.4 kilograms per hour (kg/hr) and 2.8 Mg/yr (3.0 pounds per hour (lb/hr) and 3.1 tpy); • Reduce from all affected process vents the emissions of total organic compounds (TOC) (minus methane and ethane) to a level below 1.4 kg/hr and 2.8 Mg/yr (3.0 lb/hr and 3.1 tpy); • Reduce from all affected process vents the total emissions of the HAP by 95 percent by weight or more; or • Reduce from all affected process vents the emissions of TOC (minus methane and ethane) by 95 percent by weight or more.	Process vents as defined in 40 CFR § 63.7957 used in site remediation of media (e.g., soil and groundwater) that could emit hazardous air pollutants (HAP) listed in Table 1 of Subpart GGGGG of Part 63 and vent stream flow exceeds the rate in 40 CFR § 63.7885(c)(1)--**relevant and appropriate**	40 CFR § 63.7890(b)(1) - (4) 15A NCAC 02D.1110
Standards for closed vent systems and control devices used in treatment of VOC contaminated groundwater	For each closed vent system and control device you use to comply with the requirements above, you must meet the operating limit requirements and work practice standards in Sec. 63.7925(d) through (j) that apply to the closed vent system and control device. NOTE: EPA approval to use alternate work practices under paragraph (j) in 40 CFR § 63.7925 will be obtained in a CERCLA document.	Closed vent system and control devices as defined in 40 CFR § 63.7957 that are used to comply with § 63.7890(b)--**relevant and appropriate**	40 CFR § 63.7890(c) 15A NCAC 02D.1110

TABLE 1
Action-Specific ARARs
CTS of Asheville Inc. Superfund Site
Asheville, North Carolina

Action	Requirements	Prerequisite	Citation
Monitoring of closed vent systems and control devices used in treatment of VOC contaminated groundwater	Must monitor and inspect the closed vent system and control device according to the requirements in 40 CFR § 63.7927 that apply to the affected source. NOTE: Monitoring program will be developed as part of the CERCLA process and included in an appropriate CERCLA document.	Closed vent system and control devices as defined in 40 CFR § 63.7957 that are used to comply with § 63.7890(b)--**relevant and appropriate**	40 CFR § 63.7892 15A NCAC 02D.1110
Discharge of Wastewater from a Groundwater Treatment Unit			
Discharge into POTW--General prohibitions	A User may not introduce into a POTW any pollutant(s) which cause Pass Through or Interference. These general prohibitions and the specific prohibitions in paragraph (b) of this section apply to each User introducing pollutants into a POTW whether or not the User is subject to other National Pretreatment Standards or any national, State, or local Pretreatment Requirements.	Indirect discharge of pollutants into POTW from Industrial User as defined 40 CFR § 403.3--**applicable**	40 CFR § 403.5 (a)(1) National pretreatment standards: Prohibited discharges
Discharge into POTW--Specific prohibitions	In addition, the following pollutants shall not be introduced into a POTW: (1) Pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, waste streams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR § 261.21;	**applicable**	40 CFR § 403.5 (b)(1) 15A NCAC 02H.0909
	(2) Pollutants which will cause corrosive structural damage to the POTW, but in no case Discharges with pH lower than 5.0, unless the works is specifically designed to accommodate such Discharges;	**applicable**	40 CFR § 403.5(b)(2) 15A NCAC 02H.0909
	(3) Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW resulting in Interference;	**applicable**	40 CFR § 403.5(b)(3) 15A NCAC 02H.0909

TABLE 1
Action-Specific ARARs
CTS of Asheville Inc. Superfund Site
Asheville, North Carolina

Action	Requirements	Prerequisite	Citation
	(4) Any pollutant, including oxygen demanding pollutants (BOD, etc.) released in a Discharge at a flow rate and/or pollutant concentration which will cause Interference with the POTW;	Indirect discharge of pollutants into POTW from Industrial User as defined 40 CFR § 403.3 - **applicable**	40 CFR § 403.5(b)(4) 15A NCAC 02H.0909
	(5) Heat in amounts which will inhibit biological activity in the POTW resulting in Interference, but in no case heat in such quantities that the temperature at the POTW Treatment Plant exceeds 40 °C (104 °F) unless the Approval Authority, upon request of the POTW, approves alternate temperature limits;	**applicable**	40 CFR § 403.5(b)(5) 15A NCAC 02H.0909
	(6) Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;	**applicable**	40 CFR § 403.5(b)(6) 15A NCAC 02H.0909
	(7) Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems;	**applicable**	40 CFR § 403.5(b)(7) 15A NCAC 02H.0909
	(8) Any trucked or hauled pollutants, except at discharge points designated by the POTW.	**applicable**	40 CFR § 403.5(b)(8) 15A NCAC 02H.0909
Discharge into POTW--Local prohibitions	Where specific prohibitions or limits on pollutants or pollutant parameters are developed by a POTW in accordance with 40 CFR § 403.5(c) , such limits shall be deemed Pretreatment Standards for the purposes of section 307(d) of the CWA.	Indirect discharge of pollutants into POTW from Industrial User as defined 40 CFR § 403.3-- **applicable**	40 CFR § 403.5(d) 15A NCAC 02H.0909
Waste Characterization and Storage			
Characterization of solid waste (e.g., well soil cuttings)	Must determine if solid waste is hazardous waste or if waste is excluded under 40 CFR § 261.4(b); and	Generation of solid waste as defined in 40 CFR § 261.2 and which is not excluded under 40 CFR § 261.4(a)--**applicable**	15A NCAC 13A.0107, only as it incorporates 40 CFR § 262.11(a)

TABLE 1
Action-Specific ARARs
CTS of Asheville Inc. Superfund Site
Asheville, North Carolina

Action	Requirements	Prerequisite	Citation
	Must determine if waste is listed under 40 CFR Part 261; or	**applicable**	15A NCAC 13A.0107, only as it incorporates 40 CFR § 262.11(b)
	Must characterize waste by using prescribed testing methods or applying generator knowledge based on information regarding material or processes used.	**applicable**	15A NCAC 13A.0107, only as it incorporates 40 CFR § 262.11(c)
	Must refer to Parts 261, 262, 264, 265, 266, 268, and 273 of Chapter 40 for possible exclusions or restrictions pertaining to management of the specific waste.	Generation of solid waste which is determined to be hazardous--**applicable**	40 CFR § 262.11(d)
Storage of solid waste	All solid waste shall be stored in such a manner as to prevent the creation of a nuisance, insanitary conditions, or a potential B65public health hazard.	Generation of solid waste which is determined not to be hazardous--**relevant and appropriate**	15A NCAC 13B.0104(f)
	Containers for the storage of solid waste shall be maintained in such a manner as to prevent the creation of a nuisance or insanitary conditions. Containers that are broken or that otherwise fail to meet this Rule shall be replaced with acceptable containers.	**relevant and appropriate**	15A NCAC 13B.0104(e)
Characterization of hazardous waste	Must obtain a detailed chemical and physical analysis on a representative sample of the waste(s), which at a minimum contains all the information that must be known to treat, store, or dispose of the waste in accordance with pertinent sections of 40 CFR §§ 264 and 268.	Generation of RCRA-hazardous waste for storage, treatment or disposal--**applicable**	40 CFR § 264.13(a)(1)
	Must determine the underlying hazardous constituents [as defined in 40 CFR § 268.2(i)] in the waste.	Generation of RCRA characteristic hazardous waste (and is not D001 non-wastewaters treated by CMBST, RORGS, or POLYM of Section 268.42 Table 1) for storage, treatment or disposal--**applicable**	40 CFR § 268.9(a)

TABLE 1
Action-Specific ARARs
CTS of Asheville Inc. Superfund Site
Asheville, North Carolina

Action	Requirements	Prerequisite	Citation
	Must determine each EPA Hazardous Waste Number (Waste Code) to determine the applicable treatment standards under 40 CFR 268.40, et. seq.	**applicable**	40 CFR 268.9(a)
	Must determine if the waste is restricted from land disposal under 40 CFR § 268 et seq. by testing in accordance with prescribed methods or use of generator knowledge of waste.	**applicable**	40 CFR § 268.7
Temporary storage of hazardous waste in containers	A generator may accumulate hazardous waste at the facility provided that:	Accumulation of RCRA hazardous waste on site as defined in 40 CFR § 260.10--**applicable**	40 CFR § 262.34(a)
	•waste is placed in containers that comply with 40 CFR §§ 265.171 - 173; and	**applicable**	40 CFR § 262.34(a)(1)(i)
	•the date upon which accumulation begins is clearly marked and visible for inspection on each container	**applicable**	40 CFR § 262.34(a)(2)
	•container is marked with the words "hazardous waste"; or	**applicable**	40 CFR § 264.34(a)(3)
	•container may be marked with other words that identify the contents.	Accumulation of 55 gallons or less of RCRA hazardous waste at or near any point of generation--**applicable**	40 CFR § 262.34(c)(1)
Use and management of hazardous waste in containers	If container is not in good condition (e.g. severe rusting, structural defects) or if it begins to leak, must transfer waste into container in good condition.	Storage of RCRA hazardous waste in containers--**applicable**	40 CFR § 265.171
	Use container made or lined with materials compatible with waste to be stored so that the ability of the container is not impaired.	**applicable**	40 CFR § 265.172
	Keep containers closed during storage, except to add/remove waste.	**applicable**	40 CFR § 265.173(a)
	Open, handle and store containers in a manner that will not cause containers to rupture or leak.	**applicable**	40 CFR § 265.173(b)

TABLE 1
Action-Specific ARARs
CTS of Asheville Inc. Superfund Site
Asheville, North Carolina

Action	Requirements	Prerequisite	Citation
Waste Treatment and Disposal			
Disposal of solid waste	Shall ensure that waste is disposed of at a site or facility whichis permitted to receive the waste.	Generation of solid waste intended for off-site disposal--**relevant and appropriate**	15A NCAC 13B.0106(b)
Disposal of RCRA hazardous waste in a land-based unit	May be land disposed if it meets the requirements in the table "Treatment Standards for Hazardous Waste" at 40 CFR § 268.40 before land disposal.	Land disposal, as defined in 40 CFR § 268.2, of restricted RCRA waste--**applicable**	40 CFR § 268.40(a)
	Must be treated according to the alternative treatment standards of 40 CFR § 268.49(c) or must be treated according to the UTSs [specified in 40 CFR § 268.48 Table UTS] applicable to the listed and/or characteristic waste contaminating the soil prior to land disposal.	**applicable**	40 CFR § 268.49(b)
Disposal of RCRA characteristic wastewaters in a POTW	Not prohibited if the wastes are treated for purposes of the pre-treatment requirements of section 307 of the CWA, unless the wastes are subject to a specified method of treatment other than DEACT in 40 CFR §268.40, or are D003 reactive cyanide.	**applicable**	40 CFR § 268.1(c)(4)(ii) 15A NCAC 13A.0112

TABLE 1
Action-Specific ARARs
CTS of Asheville Inc. Superfund Site
Asheville, North Carolina

Action	Requirements	Prerequisite	Citation
Transportation of Wastes			
Transportation of hazardous waste on-site	The generator manifesting requirements of 40 CFR §§ 262.20 - 262.32(b) do not apply. Generator or transporter must comply with the requirements set forth in 40 CFR §§ 263.30 and 263.31 in the event of a discharge of hazardous waste on a private or public right-of-way.	Transportation of hazardous wastes on a public or private right-of-way within or along the border of contiguous property under the control of the same person, even if such contiguous property is divided by a public or private right-of-way--**applicable**	40 CFR § 262.20(f)
Transportation of hazardous waste off-site	Must comply with the generator requirements of 40 CFR §§ 262.20 - 23 for manifesting, Section 262.30 for packaging, Section 262.31 for labeling, Section 262.32 for marking, Section 262.33 for placarding, Sections 262.40 and 262.41(a) for record keeping requirements, and Section 262.12 to obtain EPA ID number.	Off-site transportation of RCRA-hazardous waste--**applicable**	40 CFR § 262.10(h)
	Must comply with the requirements of 40 CFR §§ 263.11 - 263.31.	Transportation of hazardous waste within the United States requiring a manifest — **applicable**	40 CFR § 263.10(a)
Transportation of hazardous materials	Shall be subject to and must comply with all applicable provisions of the HMTA and DOT HMR at 49 CFR §§ 171 - 180.	Any person who, under contract with a department or agency of the federal government, transports "in commerce," or causes to be transported or shipped, a hazardous material--**applicable**	49 CFR § 171.1(c)

TABLE 2
Location-Specific ARARs
CTS of Asheville Inc. Superfund Site
Asheville, North Carolina

Location	Requirements	Prerequisite	Citation(s)
Presence of Wetlands	Shall take action to minimize the destruction, loss or degradation of wetlands and to preserve and enhance beneficial values of wetlands.	Federal actions that involve potential impacts to, or take place within, wetlands – **To Be Considered**	Executive Order 11990 Section 1.(a) *Protection of Wetlands*
	Shall avoid undertaking construction located in wetlands unless: (1) there is no practicable alternative to such construction, and (2) that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use.		Executive Order 11990, Section 2.(a) *Protection of Wetlands*
Presence of Wetlands (as defined in 44 C.F.R. § 9.4)	The Agency shall minimize[1] the destruction, loss or degradation of wetlands.	Federal *actions affecting or affected by Wetlands* as defined in 44 C.F.R. § 9.4 – **relevant and appropriate**	44 C.F.R. § 9.11(b)(2) **Mitigation**
	The Agency shall preserve and enhance the natural and beneficial wetlands values.		44 C.F.R. § 9.11(b)(4) **Mitigation**
	The Agency shall minimize: • Potential adverse impact the action may have on wetland values.		44 C.F.R. § 9.11(c)(3) *Minimization provisions*
Presence of Floodplain(s) designated as such on a map[2]	Shall take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health and welfare, and to restore and preserve the natural and beneficial values served by floodplains.	Federal actions that involve potential impacts to, or take place within, floodplain – **To Be Considered**	Executive Order 11988 Section 1. *Floodplain Management*

[1] *Minimize* means to reduce to smallest amount or degree possible. 44 C.F.R. § 9.4 Definitions.
[2] Under 44 CFR § 9.7 ***Determination of proposed action's location***, Paragraph (c) *Floodplain determination*. One should consult the FEMA Flood Insurance Rate Map (FIRM), the Flood Boundary Floodway Map (FBFM) and the Flood Insurance Study (FIS) to determine if the Agency proposed action is within the base floodplain.

TABLE 2
Location-Specific ARARs
CTS of Asheville Inc. Superfund Site
Asheville, North Carolina

Location	Requirements	Prerequisite	Citation(s)
	Shall consider alternatives to avoid, to the extent possible, adverse effects and incompatible development in the floodplain. Design or modify its action in order to minimize potential harm to or within the floodplain		Executive Order 11988 Section 2.(a)(2) *Floodplain Management*
	Where possible, an agency shall use natural systems, ecosystem processes, and nature-based approaches when developing alternatives for consideration.		Executive Order 13690 Section 2. (c)
Presence of Floodplain(s) designated as such on a map[1]	The Agency shall design or modify its actions so as to minimize[3] harm to or within the floodplain	Federal *actions affecting or affected by Floodplain* as defined in 44 C.F.R. § 9.4 – **relevant and appropriate**	44 C.F.R. § 9.11(b)(1) **Mitigation**
	The Agency shall restore and preserve natural and beneficial floodplain values.		44 C.F.R. § 9.11(b)(3) **Mitigation**
	The Agency shall minimize: • Potential harm to lives and the investment at risk from base flood, or in the case of critical actions[4], from the 500-year flood; • Potential adverse impacts that action may have on floodplain values		44 C.F.R. § 9.11(c)(1) and (3) *Minimization provisions*

[3] *Minimize* means to reduce to smallest amount or degree possible. 44 C.F.R. § 9.4 Definitions.
[4] See 44 C.F.R. § 9.4 Definitions, *Critical action*. Critical actions include, but are not limited to, those which create or extend the useful life of structures or facilities such as those that produce, use or store highly volatile, flammable, explosive, toxic or water-reactive materials.

APPENDIX A

Waste Management
ENVIRONMENTAL QUALITY

PAT MCCRORY
Governor

DONALD R. VAN DER VAART
Secretary

LINDA CULPEPPER
Director

February 11, 2016

Mr. Craig Zeller
Superfund Branch, Waste Management Division
US EPA Region IV
61 Forsyth Street. SW
Atlanta, Georgia 30303

SUBJECT: Concurrence with Interim Action Record of Decision
CTS of Asheville, Inc.
Asheville, Buncombe County

Dear Mr. Zeller:

The State of North Carolina by and through its Department of Environmental Quality, Division of Waste Management (herein after referred to as "the state"), reviewed the Interim Action Record of Decision (ROD) received by the Division on February 8, 2016 for the CTS of Asheville, Inc. Superfund Site and concurs with the selected remedy, subject to the following conditions:

1. State concurrence on the ROD for this site is based solely on the information contained in the ROD received by the State on February 8, 2016. Should the State receive new or additional information which significantly affects the conclusions or amended remedy contained in the ROD, it may modify or withdraw this concurrence with written notice to EPA Region IV.

2. State concurrence on this ROD in no way binds the State to concur in future decisions or commits the State to participate, financially or otherwise, in the cleanup of the site. The State reserves the right to review, overview comment, and make independent assessment of all future work relating to this site.

3. If, after remediation is complete, the total residual risk level exceeds 10^{-6}, the State may require deed recordation/restriction to document the presence of residual contamination and possibly limit future use of the property as specified in NCGS 130A-310.8.

The State appreciates the opportunity to comment on the ROD and looks forward to working with EPA on the remedy for the subject site. If you have any questions or comments, please call Mr. Nile Testerman at (919) 707-8339.

Sincerely,

Jim Bateson, L G., Chief
Superfund Section
Division of Waste Management

cc: David Lown, NC Superfund

APPENDIX B

PUBLIC FORUM

PROPOSED PLAN FOR INTERIM REMEDIAL ACTION

T.C. ROBERSON HIGH SCHOOL AUDITORIUM
250 OVERLOOK ROAD
ASHEVILLE, NORTH CAROLINA 28803

TUESDAY, OCTOBER 13, 2015

6:08 P.M.

PANEL MEMBERS:

ANGELA MILLER, COMMUNITY INVOLVEMENT COORDINATOR
BRIAN TURNER, NAPL/TCE
JOHN AKER
JOE BELCHER, COUNTY COMMISSIONER
FRANKLIN HILL, DIVISION DIRECTOR
NESTER YOUNG

APPEARANCES:

CRAIG ZELLER, EPA REMEDIAL PROJECT MANAGER
US EPA Region 4
Superfund Division
11th Floor
61 Forsyth Street, Southwest
Atlanta, Georgia 30303

REPORTED BY: BARBIE M. LANE, CVR-M, CCR
ASHEVILLE REPORTING SERVICE

(Document CB111)

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P R O C E E D I N G S

October 13, 2015 6:08 p.m.

BY MS. MILLER:

Good evening everyone. Thank you so much for coming out tonight. For those of you who don't know me, my name is Angela Miller. I am Community Involvement Coordinator for this evening. I've been in the community now since about 2008 and I feel like I've built some friendships here. I'm still working on some. And really enjoy coming out here. I'm really excited about tonight because, believe it or not, we're not coming out tonight to talk -- we're actually coming out tonight because we're going to plan to start a cleanup. So I'm really pumped up about that. Some exiting things have happened since the site was proposed a couple of years ago. Thanks to the community working so hard the building has come down. Filtration systems were installed. Now we have waterlines. And tonight we're here to talk about the cleanup, so I'm really excited about it. We've got some elected officials in the audience tonight that I'd like to introduce. Some North Carolina State

Reps. We have Brian Turner, and we have John Aker, we have County Commissioner Joe Belcher. And are there any others that we didn't get a chance to speak to beforehand? And some of the EPA Reps tonight. We've got Division Director, Franklin Hill. We have Mr. Young who is Section Chief for Craig Zeller's branch. And then, of course, we have Craig Zeller himself, the project manager. And then myself, Angela Miller.

BY UNKNOWN SPEAKER:

We've also got representatives from Patrick McHenry's office and ---

BY MS. MILLER:

Thank you.

BY UNKNOWN SPEAKER:

Sorry, we didn't get to say hello beforehand.

BY MS. MILLER:

I'm sorry about that. Thank you. Thank you. Thank you all for being here. But this is kind of the format that we have tonight. I have a court reporter that's going to transcribe the meeting. She's going to transcribe the presentation that Craig's going to give, and then we're going to open it up to

question and answers. And this is the overview of what Craig is going to give tonight, just to talk about the site background, which all of us know the site background very well. But just in case we have some newcomers, we're going to talk about some site background, the MPL -- I'm sorry, the NAPL and the TCE source. We're going to talk about the focus feasibility study, the preferred alternative, comment period that's going on right now, and all that other good stuff. And then we'll open it up to question and answers towards the end. But I want to thank you very much for taking time out of your schedules to come out tonight to discuss the plan. Thanks again. And at this point I'm going to turn it over to Mr. Young.

BY MR. YOUNG:

Good evening, folks. I'm Nester, and I happy to be Craig's supervisor, and I'm here tonight to help him with the meeting. I want to reiterate what Angela said. We are excited here because we're actually talking about a cleanup. The cleanup of the source of contamination at the site. So we're excited

to present that proposed plan to you tonight. So when we get to the question and answer period I'm going to moderate that session, and just so that we are respectful of everybody's time we'll kind of get a -- have a few ground rules. Please hold your questions until the end of the presentation. We want to have Craig -- give him the opportunity to run through the whole presentation and your questions might be answered at the end of the presentation if you have any at the beginning. We're going to have two mics set up. One over here and one over on that aisle. So if you have questions at that time, if you want to stand up and line up at the end of the aisle and we'll take your question then. When you come up to speak, if you could first identify who you are. Say your name, and if you could spell it that would help. As Angela said, we have a court reporter over here and we're taking everybody's comment, but we need to identify who made that comment. So if you would say your name and then spell it for us. Your question and/or comment will have a time limit of three minutes. If you have a

follow-up question we would ask if you could just sit down and come back when everybody's gone through all the questions. I want to give everybody an opportunity to ask their question before we start taking second questions and follow-up comments. So if you would do that for us. Also, if you have a lengthy comment, you don't have to necessarily present it here. You can submit it in writing and that will become part of the administrative record. So all the comments made here tonight, like I said, is being reported by the court reporter and will become a part of the administrative record. And any comments that you have that you submit in writing we will also add that to the administrative record. And we provided a commented form at the front desk when you signed up. If you don't have one and you'd like to submit a written comment, if you just go back out there and grab one of these forms, we'll be glad to take your written comment. And all the comments will be addressed at a later time. Hopefully within a few weeks. Again, we just want to run this smoothly and

we want to be mindful of everybody's time. I appreciate everybody coming out and listening to what we have to say. And so, with that, we're going to go ahead and get started with Craig's presentation, and I'll be back afterwards to take your comments. Thank you.

BY MR. ZELLER:

Thank you, Nester. For those who don't know me, my name is Craig Zeller. I'm the project manager in charge of overseeing the CTS cleanup project. I've been on this project, I guess, really since about January of this year. I've been working with EPA since about 1990. So I've got 25 years experience in the business. I've actually had the good fortune of cleaning up a lot of stuff and that's what I'm here to do today is talk about how we're going to get this stuff cleaned up so we can move on. Again, I think the important part about this meeting is to get your public comment. I'm going to kind of go through some -- I guess, about 12 to 14 slides. They're really to summarize -- summarize what you have in front of you. Hopefully that six or seven page proposed plan with the figure on it. Try

to get into a little more detail on that. I'm going to try and kind of follow the format of that proposed plan. So we're talking about the CTS of Asheville site. It's right here at 235 Mills Gap Road, Sweet Creek Road, 25 -- 25 and 25A over this way. This is Southside Village. We have private residences on the east. Next slide, Rachel, please. So originally the site was this building before it was demolished in December of 2011. It was about 95,000 square feet of industrial complex. It was a little over two acres, and about 54 acres in size. About nine acres of that was actually used to manufacture. What they did up here was make electrical components that were used in auto parts and hearing aids. Those parts were electric plate with tin, nickle, zinc and silver. Like many industries in this time-frame in the '50s, all TCE and PCE involved organic compounds show up in probably about 75 percent of EPA's Superfund sites. TCE was widely used as a degreaser at time. So we do -- we're very familiar with it. From 1952 to '59 the plant itself up here in Asheville was run by this

international resistence company. Through a series of mergers and acquisitions that is now Northup Grumman. Northup Grumman is a big aerospace contractor that you may or may not have heard of. At that point in time it was sold off to CTS. CTS stands for the Chicago Telephone Supply. They got rid of that facility there -- here on this 54 acre parcel from about '59 to '86. Next slide, please, Rachel. In December '86 it was sold to a local real estate company known as Mills Gap Road Associates. They still own it. In 1997 about 45 acres of that was transferred to build the Southside Village Estates property. The nine acre plant site that was primary home to all the manufacturing facilities. Their operations at that time has pretty much been vacant and unoccupied since the '90s. Carter Williamson, the previous owner, was up here and was able to get that building demolished with the aid of Buncombe County in December, 2011. The slab is still out there, as most of you know. There's a couple interesting features outside. These are some of the old saddles that housed the old fuel oil tank.

This is some of the floor draining features you see out there that sunk. I think it properly took a really -- in my opinion, took a major step towards addressing the risk and getting this site cleaned up in January of 2012 when the EPA reached an agreement with CTS for a full site-wide remedial investigation and feasibility study under CERCLA, also known as Superfund. The site then was put on the national priorities list in 2012. Next slide, please. So what have we done up here besides doing a lot of talking? We actually have accomplished a fair amount of cleanup work here over the years. The first big thing that was done was there was a soil vapor extraction system put in that's called the SVE system to remove vapors from the dry zone. There's a fancy term for that. It's called the beta zone. But this SVE system pulls 6,500 pounds of volatile organics from above the water table. This is basically a vacuum system that blew air in, sucked air out. And over the course of about a four year period got a good junk of vapors, or contaminants, out of that dry zone. Again,

above the water table. That system -- I believe the SVE has been very widely used in the United States. I've got a system that just shut down actually down 60 miles south of here in Greenville. All of these systems are turned off for a reason, because eventually, we start to just keep sucking in, you run out of contaminants to vacuum up. So they're all turned off when they reached that kind of low recovery zone. The second cleanup action that was done out here was the installation of filtration systems on homes for those properties in a one mile radius that were relying on well water for their drinking water source. As a precautionary measure those homes were put on these filtration systems. Right here is a nice picture. They're actually a pretty small. It's some filtration, some carbon, again to pull these VOCs out of that -- potentially VOC would be in that drinking water. To get them out of there before they were ingested. There was 87 residence of the 101 said yes, EPA, yes CTS, we want to be hooked up to them. There were 14 homes that said -- or, excuse me, 14 homes

that once the waterlines were installed by Buncombe County in '14 and '15, 87 homes went off the filtration systems and onto the actual city water supplied by Buncombe County. Fourteen homes said no thank you CTS, no thank you EPA, and wanted to remain on filtration systems. We don't want to hook up to city water. So those homes we are continuing to suggest -- continuing to maintain those filtration systems so they operate effectively, and we're also continuing to monitor their water on an annual basis to make sure that whatever they're drinking is safe. And thus far all of that is very good. Now, the third cleanup action that we've done since we got set up here was this remediation system on eastern springs area. This is a nice little picture of that. On the east, as groundwater moved off of the CTS site it would empty in, and still does on some private property on the eastern side. As that volatile organics came out of the groundwater into the surface water they were volatilizing and causing some issues. Some unsafe issues with regard to air. Outdoor air. So in order

to fix that, that spring system was covered with a low-density polyethylene liner that was pumping air into the system. It's very similar to the soil vapor extraction system that we ran from 2006 to 2010 that was pumping air into that, and then we're extracting air, you know, the vacuum, I believe, at 12 locations. So that is in order to improve the air quality. But on top of improving air quality on that eastern side of the site, we're also getting some benefits with regard to surface water quality. Surface water quality entering that stream had a fair amount of TCE in it, and now we're down to about 30, 35 parts per billion. So we're getting about 99 percent reduction in surface water quality as well. So that's a nice ancillary benefit. Next slide, please, Rachel. So moving forward, we've covered the site background. We've covered what we've done for -- soil vapor extraction, waterline installation, eastern springs remediation system. So what else have we been doing? As part of the 2012 administrative agreement, administrative order we reached with EPS, the first thing out of

the gate was that we wanted to do is let's look for this NAPL. NAPL is -- the fancy term is non-aqueous phase liquid. It's -- it is oils that don't dissolve or mix readily with water. Okay? They float. It either floats if they are LNAPL or they sink if they're DNAPL. If they're heavy than water. So we asked CTS. CTS agreed to go out and let's get a good handle on this PCE extent as well as the TCE, or trichloroethylene contamination out there. So the fieldwork is done pretty much the last half of '13, the first couple of months of '14. And here's some really good cutting edge technology. We've come a long ways with -- you know, again, since we had a lot of practice. Not just industry, but because TCE and PCE were used in a wide variety of these Superfund sites over the years we got pretty good at the tools and the investigative measures being employed to find this stuff. So this is pretty cutting edge stuff. What's called a MIP probe, or a membrane interface probe. This is a tool that you put down on a boring device that goes in the ground. And what it looks for is TCE in

the surface. It actually reads not unlike an EKG. So as we go down to the subsurface and you're going down the boring and going down the bedrock and it hits TCE it starts to see some movement on it. So it's actually pretty easily to interpret. That MIP probe looks for TCE. We've also used what's called a laser induced fluorescence probe, or LIF. It detects petroleum. So it's the same thing. It's down the hole tube. It's a tool that's put on borings that go into the subsurface. It's also down there sniffing around and looking around for petroleum. It's fluorescent, so it shines back and it kind of gives you a little blimp like, hey, there might be something there we need to be concerned about. In addition to some of that cutting edge technology we use, the good ole tried and true groundwater samples. That report was issued to the EPA in May of last year. So before we move on here, these are some soil and some groundwater samples actually collected from SP42. SP42 is right in the middle of this blob I'm going to show you here in a minute. But what you see here

is not sugared ice cream. This yellow little layer you see is a floating petroleum product. That's weathered fuel oil, likely diesel that was used in the industrial broiler power in manufacturing operations. And that's what you're seeing there, a floating layer of free product that came out of this NAPL/TCE source investigation. So what did we find? Well, here's what that investigation found. So we have this little blob. Hopefully that shows up pretty good for you all. This is about one acre. And what that is, it's a commingled plume. It's a -- we measured it. It's anywhere from, say, one to four feet thick of floating free product which is this weathered fuel oil that came from the industrial broiler, and it's commingled with concentrated TCE. Well, why is that commingled with concentrated TCE. Well, the TCE is doing exactly what it was really invented to do. TCE is attracted to -- it's assimilated. It really wants to kind of blob onto this weathered fuel oil. That's kind of what it was used for. It was a degreaser. So it's actually absorbing on that weathered fuel oil.

That's our concentrated material there. Now, this source area in this investigation effort that we looked at now is essentially cleaned up. We thought we did a pretty good job cleaning up that soil. The focus of this work is now, again, is some groundwater table to bedrock. In this area, this one acre area, the groundwater table is anywhere from 15 to 25 feet below ground surface in the depth to the hard rock, or the bedrock, is anywhere from 30 to 60 feet below ground surface. So if you assume there's an average 25 feet area of saturated thickness over a wide area, that gives you volume of about 40,500 feet of material contained in that one acre area. So the post cleanup plan that we're talking about tonight -- next side, please -- is this intermedial action. What we're talking about is this one acre blob right here that is fuel oil commingled with TCE. This is a source control remedy. This is not the final remedy. There will be a final remedy coming in the next several years. The goal of this remedy is to get a 95 percent reduction in the TCE mass that's out there in this one acre little

blob. Now, the final remedy that will come in several years is going to address any of the residual NAPL or TCE that we do not get. But this remedy will be addressed at a later time. The one thing that we're not addressing with this remedy is deep groundwater. So think of our strategy as kind of a layer cake. Our cleanup strategies kind of run like this. The first layer that we addressed in 2006 to 2010 was that dry zone, the beta zone soil. 6,500 pounds of material pulled out of that dry zone. This action then goes down a layer in the layered cake and goes from the groundwater table down to the hard rock surface. We are not talking about deep groundwater yet. Deep groundwater is going to have to be addressed. But the thought concept here is that by addressing the beta zone soil, by addressing this shallow overburdened groundwater, we expect to see beneficial results to the deep groundwater. Will that get us all the way there? I can't tell you that. It's likely we're going to have to do something to the deep groundwater. I just don't have any answer to that question yet. Obviously we're

going to have to address surface water. If you look at this map, it's on page seven of the proposed plan. We've got groundwater moving in two directions generally from the source area. We've got groundwater that wants to move to the east, in the eastern springs remediation area, and that's why that remediation system was put in there in late '14. We also have, to a lesser degree, some material moving over to the west. Moving over to what we call the western springs area nearest the Southside Village area. So when I'm done here, I can't declare victory and stand up here at this stage and tell you folks that the CTS site is clean until I can turn off this remediation system on these. Granted, we're not going to run on this eastern spring remediation system forever. It was never intended to be a forever situation. But what I've got to do is I've got to shut down all the TCE that wants to flow there. I can't turn off that eastern spring remediation system until I shut off the flow of TCE to it. So clearly I've got that left to do, and clearly I have some work to do here on the

west side. Now, you've probably been following this story a little bit, and through correspondence between EPA, CTS and their consultant AMEC, we have been strongly encouraging CTS to consider expanding the treatment area north from this one acre area. Clearly this one acre area is the bad spot onsite. It needs to be cleaned up. No one is going to sit here and say, you know, we're going to blow that off. It doesn't need to be done. Obviously that has to be done. It's a step in the right direction. But we've been trying to pick our head up a little bit and look down the road, look down the horizon maybe a little bit. We've been focusing in on the groundwater concentration we're seeing at this monitoring well 6 pare and the monitoring well 7 pare. This monitoring well 6, 6A, is the deep well of these two. 6A sits down on top of rock. I believe it's 81 feet down. It has a concentration of 62,100 parts per billion. The drinking water standard in the city of North Carolina is five. That's roughly 10,000 times the final drinking water standard. Obviously for us to feel this job

is completed correctly we're going to have to address that TCE mass in the subsurface. It's important to note it's TCE only. In fact, this far north, a couple hundred feet north, we know it has the TCE base fuel oils. TCE only. And it's pretty much down deep. The same thing at 7. Seven is up on the guard shack. This material kind of wants to move to the west. It's about 53,000 PPL. So that area obviously at some point in time sooner or later is going to have to be addressed. We've encouraged CTS to look at that. So far they have kind of said respectively no thank you. That as, you know, part of the strategy that we've been looking at comes later. EPA continues to evaluate the feasibility of doing that now rather than later. That had some short-term, long-term trade offs. The last thing EPA wants to do here is be in the way of cleanup. We have a responsible party that's agreeing to clean up an acre. The property that absolutely has to be done. That's a good thing. If -- you know, the things that I have to start considering is if we force the cleanup, and we do have some options to force

a two acre or three acre cleanup, that pack may be the lawyers. Lawyers oftentimes leads to delays. So this is part of the calculus that EPA and state partners are thinking about. Part of the reason we're here tonight, some of the things I want to hear from you all tonight is what do you think. Do you want to do this step one, step two. Should we do this all now. This is part of the night's criteria. So moving forward. Move past that slide, please, Rachel. We put together as part of this focused feasibility study dealing with this one acre plume. Right now we're talking about the one acre plume. The plume is mixed with the weathered fuel oil and a high concentration TCE. We put together five alternatives for you all to consider and for us to consider. I like to refer to it as the menu. What do you want to eat tonight at the restaurant. So the first action is what we're required to do by law. We're required by Superfund to consider this. This is the good ole status quo alternative. This means nothing gets done now. We kick the can down the road and do it all later. Again, required

by law. Not likely for us to select tonight, or we wouldn't have gone through this exercise. Second alternative known as multi-phase extraction, or MPE. Also known as public treatment. We have hundreds of pump and treat systems installed and in operation across the United States. Manned by responsible parties like CTS. A lot of them by EPA on taxpayer dollars. What this does is it gives us a series of wells to extract this contaminated groundwater free product. It brings that material to the ground -- excuse me, above ground where it's separated. We treat the water, we separate the TCE in the fuel product. The water is treated to a point where it's safe enough to discharge through public sewer, and then we deal with TCE and any weathered fuel oil onsite and it gets shipped offsite for disposal. That was assumed to be a 10 year operating period for just about $2.7 million. I've got some pump and treat systems -- actually one that's been operating since 1997. And we're burning about $400,000 a year cleaning that thing up. So it's been -- so again, we've tried and true.

We know what this thing can do. Alternative to -- it's real good as a containment measure. It would stop -- it might even stop the migration offsite to the east and west a little bit, but it's kind of a long-term. This is the kind you got to get in and you do this for 10 years. So alternative three is a little bit different. This is what's called electrical resistence heating. It actually uses electrodes. We would put electrodes in the ground. And in this alternative we are actually boiling groundwater. We're going to heat up that groundwater to 80, 85, 90 degrees C and we're going to burn off those VOCs. Primarily the TCE and any of the diesel stuff that's in that one to four foot layer of oil. Now, that vapor is going to be collected just like almost identical to the soil vapor extraction system that we had installed in the beta zone. We're going to have vent wells that are above the groundwater table as this stuff is cooked off. We'll recover those vapors. Those vapors will be treated onsite and discharged in the atmosphere once they're clean and protected. It's important to note

that these vapors are recovered under negative pressure, so this entire one acre area is going to have a vacuum on it. I know I've already got some previous comments about people being concerned about we're going to release this toxic, you know, cloud over the neighboring community and make a bad situation worse. But we will have that whole system under negative pressure. And, of course, we'll be monitoring air on the parameter of the site to make sure we're not releasing VOCs to the neighboring communities. It was assumed to be a 19-month design installed and fully operated for a cost of about $4.2 million. Next slide, please, Rachel. Alternative four, very effective. In situ chemical oxidation also being used at hundreds of sites across the United States. It's -- I like to refer to it as the magic juice, the purple juice alternative. What we do with this alternative is we actually ingest a chemical oxidant, and there's many that you can use, and that chemical oxidant in this case, we assumed, it was catalyzed hydrogen peroxide. We all have some hydrogen peroxide

in our medicine cabinets to treat infections. It's slightly different, but you understand the chemistry. That oxidant then reacts to the TCE in the subsurface and it destroys that material. It actually destroys it and turns into byproducts, which is carbon dioxide and water. The reaction itself is exothermic, which means it gives off heat, so we wouldn't have to worry about vapor recovery with this system as well. The biggest drawback that we have found over about 20 years of doing this work is that the first round of, I'll call it, chemotherapy doesn't usually always work. You get that big -- that big first zap and it doesn't -- it'll kill 95 percent of that contaminant, but you always have to come back for what they call polishing advance or recoupment. Another round of treatment. So in this case we assume one primary injection of the magic juice with two polishing steps, three years to complete with a cost of right about $3.8 million. The fifth -- there is the fourth active area we looked at, the surfactant flushing, or flooding. It's used a lot in the oil industry. If you have -- you

know, what we're trying to recover here is basically oil. So we stole a lot of our plays from Exxon Mobile. We've learned from what they been doing with oil fields for the last hundred years or more. And what this -- what this remedy does is you actually inject a surfactant into the subsurface and it increases the mobility of that TCE and oil, and then we go in and we suck it out with some kind of extraction hose. Just think of the oil field analogy. Something like that. All right? Same thing. Usually the first flood event we get a big chunk out of it. We always have to usually come back in and do a little polishing stuff on that. So with this particular remedy we looked at one primary flood event, one follow-up step, two years to complete for a cost of about $3.5 million. So four remedies running for, what, 2.7 million to about 4.2 million. So they're all pretty closely tied in there. So how do we make sense of this. How do we come to a preferred alternative of what we'd like to eat off the menu. Next slide, please, Rachel. So we use -- we're required on the Superfund process to

look at nine criteria. These are a remedy evaluation criteria. The first two are called threshold criteria. These are the things that must be met for a remedy to be selected. It has to be protective of the environment and it must apply what we call ARARs, or applicable relevant and appropriate requirements. What that means is, I can decide if it must apply to all other environment regulations out there. Not just federal regs but state regs as well as local regs, as well. Now, the five middle criteria here are called balancing criteria. These typically form the majority of where all our disadvantages and advantages are sorted out with regard to the range of alternatives considered. So let's talk about them. So how permanent are these remedies from a long-term effectiveness standpoint? Electrical resistence heating, very permanent. We've known it. We've been doing this thing now for a while. It's 95 percent reduction, and we're talking elimination is gone. High degree of long-term effectiveness. With regard to ISCO, for instance. It does a pretty good job initially but we always get

this rebound. We zap it and then we see a rebound groundwater contamination. We got to come back. It's a little lesser degree of long-term permanence. Superfund also has a preference in the law, what's called a reduction in toxicity, mobility and volume, TMV. Superfund preference for treatment to reduce TMV. So, in other words, Superfund is somewhat encouraged to choose treatment technologies that reduce toxicity, mobility and volume instead of, say, capping it in place. So we do have a preference to select these remedies that employ treatment. How effective is it in the short-term. Is it going to be safe for my workers. Is it going to be safe for my communities on all four sides. Am I going to release a contamination into the creek in the short-term. Can I effectively monitor air quality to make sure I'm not, you know, releasing a plume over this zip code. The fourth one here under balancing criteria, can you do it. Can I get permits to do it. Can I find the equipment to do it. Are there vendors for thermal treatment technology. Are there vendors for in situ

chemical oxidation. Are there vendors, people that can bring me new technology. That's where we get into this whole thing of ability. In this case I have a vacant nine acre parcel. I don't have a lot of concern about disrupting any adjacent -- or, you know, existing business. A lot of these cleanups we do are on top of current operating manufacturing facilities, and we have to accommodate them and make sure they continue to make their -- make what they're making. The cost. You're going to want to know cost. The cost of the remedies here, considering all the long-term and all that that we talked about ranges from 2.7 to about 4.2 million. So all pretty tightly spaced there. The last thing we call modifying criteria. We work very closely with the state of North Carolina and Department of Environmental Quality. Whatever we select up here we want to make sure they're onboard with that. We try to maximize that and make sure we don't leave them in the dust. We want them on the bus with us heading to the final destination. And then we have the ninth and probably the most important reasons why we're

here tonight is what's the community think about this cleanup plan. So we've thrown all four of these cleanup options into the hopper and kind of spun in the little mixer and what we've proposed. And we talked about this on October 1st. Next slide, please. EPA would like to go with, and CTS actually recommended this as well, we would like to go with the electrical resistence heating option. It is the most permanent TCE source reduction. When we boil this stuff it's gone. It doesn't rebound. It doesn't come back. It's bye-bye. It does have the highest capital cost of 4.2 million, but the big advantage of this is that we're done. We don't have to come back for three polish events. Clearly we have to monitor it, but the treatment is all -- it's got to be paid up front. We don't pay -- on this pump and treat option that was $2.7 million. You know, you don't pay a lot up front but you pay 10 years of operating costs. This is all loaded up on the front end. Now, a big part of this is the localization and drilling. I kind of use the example it's kind of like painting your house. You spend 90

percent of your time filling holes, filling cracks, spackling walls, getting ready to sand it and doing all this stuff, and then when you're finally ready to paint the painting may take, you know, one day. You spend three weeks trying to get ready to paint. So the majority of this time is spent digging holes in the ground. So on the conceptual remedy that we're working with right now there would be 157 electrodes drilled over that one acre parcel down to the bedrock. And the electrode would be -- would be stationed between the ground surface down to the top of the rock. And then the treatment zone here, keep in mind, is groundwater table, top of the rock. On top of that we have vent wells. So we have to suck out the vapors that are volatilized and boiling off this material. So we're going to have a vapor collection system, and it'll look a lot like a sewer vapor extraction system on top of that. That's all subsurface work. You'll see a drill rig on top of the ground putting them in, but you won't see these pipes. We have to put in some new stainless steel monitoring wells. Why are you

putting in stainless steel monitoring wells in there. Well, plastic wells -- we have some PVC wells out there. If we have PVC wells up and we boil the subsurface mixture to 85 degrees Celsius, they won't do real well. So we have to have stainless steel wells in there. And besides that, we have to have those stainless steel wells in there to monitor 95 percent reduction. Again, the goal in this cleanup action is to reduce the concentrations of TCE from start to finish by 95 percent. How are we going to measure that. Well, we're going to measure that pretty simple. By doing the concentration sampling. So before we even start cleanup out there we're going to collect saturated soil samples. We're going to collect groundwater samples and we're going to collect NAPL samples. And by the combination of those three we will know what our starting concentrations are. So the prize, the end of the road will be very basic. It will be 95 percent, or five percent of what those concentrations were to start, and that's how we'll get there. Now, the easy part. The painting of this house or the project is the

heating. The heating itself over a 19 month time-frame is really a small piece of it. It's five months. We bring the temperature up gradually. It's kind of like boiling eggs. So we've all boiled eggs on our kitchen stove. It takes a lot of energy, produces a lot of power. We first like to get that water boiling, or boil our spaghetti noodles. But once that water begins to boil we can turn that heat off a little bit. We back that down a little bit. You can maintain that temperature, and we have to hold that temperature for five months to get all that reduction. To get this 95 percent reduction. That's what's a beautiful thing about this electrical resistence heating is, it's uniform. The heating is uniform. It's not a hot-spot treatment. It's other kind of thermal treatments what's called ECD, or electrical conductive heating that actually sticks a hot probe in the ground and does the -- you know, this soil destruction by hot (inaudible). This entire line of subsurface area will be uniform temperature. So we get uniform destruction. It gets everything down

there. This is a picture of a facility -- the company that we've been working with a little bit, AMEC's been working with, EPA's been talking to, it's called Thermal Remediation Systems, or TRS. There's only about a handful of these folks out there. There's about four or five qualified thermal contractors who can do this work. They will all likely probably want to put a bid on this when we get going down the road. This is a particular picture of a facility they had in operation down in Murphy, North Carolina. The facility's name is Moog. It's M-o-o-g. This is what it looks like. They've been -- what this facility does, they also had a TCE plume. Ironically, Northup Grumman is paying for this one. You heard their name in a earlier part of the slide. They've been heating groundwater down there for about 100 days. So a much shorter time-frame. Maybe about half of what I was talking about, five months, or, you know, a little less than that. This is what the facility looks like on top. Very small footprint on top. You're not going to hear a lot of noise. Probably most of the

construction you're going to hear is the drilling. Because, again, the drilling goes on much longer than the five months of heating effort. But it actually runs under municipal power. One of the big disadvantages of thermal 10 years ago is you needed a kind of a small nuclear reactor to run the thing. It cost you a bunch of money. We had a facility up in Oakridge, the Oakridge Reservation, that was running a thermal system up there that the Department of Energy threw a bunch of money into it because the groundwater velocities were so high we couldn't keep the temperature of the water up high enough long enough because the river, and if you think about it, just kept going through and we couldn't get the groundwater temperature up. But it runs on municipal city power. This is the power -- we call a power supply unit. These are some condensers here that deal with the steam coming out of the vapor recovery system. Early on the concentrations of vapors coming out of these systems are pretty highly concentrated, so the typical rule early on is actually burn those vapors in a catalytic

converter. They're incinerated, in other words. This was the old stack they were using. Once you boil off those things, that initial slug of highly concentrated stuff, we usually then go back to carbon filters. There's no longer a need for a catalytic, you know, converter there. But this is what it looks like. It's just really not that big. Most of the action is out of sight, out of mind. Most of the action is all these pipes and all these vents under ground. So that's kind of the system in and of itself. There's a lot of confirmation samples, like I said, that tells us we can turn the system off. You'll see that the goal is 95 percent. Typically with these things we're getting 99 percent. We're very confident in this. What my thermal experts have told me is if you only want to get 95 percent, it's actually hard to turn this thing off and stop at 95 percent. Once you get the system heated up it's going to just kind of burn everything that's there. It's like an underground fire. These things cool, but these things will take -- once we heat this thing up in five months it's

probably going to take 15 months for the system to cool down. It cools one degree C a day. Best case scenario. Once you heat this rock up it takes a while for it to -- but we will be monitoring the whole thing and making sure we're not volatilizing anything up into the adjacent communities. Rachel, next slide, please. Obviously right now we're at a public meeting here on October 13th. We started the 30 day public comment period which we are obligated to do, required to do under the Superfund statute. If there is a -- somebody wants more time, I mean, you know, I don't understand this, I need 30 more days, there is an extension option. If somebody requests it, we will grant another 30 days to extend that comment period. Right now that comment period started October 1st and will run to the 30th of this month. I have to take all the comments I've received -- again, I'm required by the Superfund statute to take all the comments that are received tonight, take all the comments that are received through email, hard copy, whatever that come in through this, you know, 30 day comment period, and me and my

team and EPA is required to fully consider all those comments as far as if you think we have the right technology, if we have the right treatment area. And then we have to write what's called responsiveness summary. You know, how do we -- how have we considered all the public comments received and how were they factored into the final cleanup plan. The final cleanup plan will be wrapped up in what's called a record of decision, or ROD. And depending on how many public comments i get, depending on how long that period goes, we're anticipating early 2016. Early next year. It's possible, if we don't have a 30 day comment period -- or extension, excuse me, and we don't have a lot of comments to address, it's possible we could have this thing up as early as this year. It's a priority for us. I promise you. We will be working hard on it. Then we have some time and some pause for legal agreements. We have to enter into an agreement with CTS to perform this work. If we issue a decision that says one acre, what's on the table right now, we think that legal agreement is going to go real

well. They've agreed -- they've agreed to go this far, this one acre. If we decide, you know, after evaluating and considering the feasibility to expand that acre to double that, that legal discussion can be a bit more arduous. Don't know. Sometimes my crystal ball doesn't work very well. There's other parties who may need to decide. Northup Grumman, as I mentioned, as I pointed out, we may decide to get them involved. Can't really comment on all that enforcement stuff. But there is going to be some legal work that has to be done. And then on top of that, we have to design the system. Obviously what you're looking at tonight, that six or seven page proposed plan is not a design document that I could or AMEC could, or any engineering firm could go to the field for procurement. We have to do some level of design and we have to get three and four people interested in this to get us a price and to give us their approach on how they would implement electrical resistence heating. That contractor then has to be awarded, that contract has to be issued. So we're kind of

reserving about six months or so, four to six months for that -- all those machinations to take place. And then I hope to be standing up here -- I mean, I hope to be onsite about a year from now heating that groundwater. That's the idea. Can we do that faster? Will we try to do that faster? Yes, absolutely will. But based on how tied down or bogged down we get in the legal stuff, how bogged down we potentially get into contracting issues, it could drag on. I don't see it dragging on much longer than this. But that's kind of a general quarter by quarter schedule. I hope to be up here, we hope to be talking about cleanup and treatment of that material through thermal treatment about a year from now. I believe I have one more slide, Rachel. So that's it. I thank you for your attention. Again, that was -- the most important part of the meeting, I would say, starts now. Because again, we are here. We have a court reporter here taking your comments for the record. We'll take all verbal comments, of course, tonight. If you're shy, you don't want to talk tonight, you want to write them down,

clearly we'll take those. But again, this is why we're here tonight. We've been working on this. We think it's a great plan. But your opinion matters to us. So we want -- and I want to hear what you all think, so the comments are important and consideration of what we actually issue in the final cleanup plan. So again, thank you for your time. And I'll be available to answer your questions.

BY MR. YOUNG:

Great. Thank you, Craig. I know you all probably have some questions. But before that, before we get to the questions, I wanted to introduce to you Mark Cassens. He's a representative of CTS. Here's here tonight to make a statement. So I'd like Mark to come up and give us a few words.

BY MR. CESSENS:

Thank you, Nester. Good evening. The EPA and the officials present this evening, and most importantly to the members of the community I want to thank you for giving me the opportunity to speak on behalf of CTS this evening. My name is Ron Cessens. I am a member of CTS executive leadership team. I've

been asked to represent CTS here tonight. CTS knows that those living near the Asheville Superfund site have been waiting for a long time for the cleanup. That's why we propose, and what Craig just went over, the interim plan that we did, because it allows us to clean up the site in the shortest time possible. We're pleased that the EPA signed off on this several weeks ago on the most progressive and effective plan for cleaning up the contamination at the source. The selected remedy allows us to get started in the least amount of time and offers the most permanent solution to the source of contamination at the site. We have tested and we know we will be able to move through 95 percent of the contamination of TCE in the source area. We appreciate the EPA asking us to do more at this time. The area north of the TCE source area was not studied because we and the EPA agreed it was most important to clean up the source first. We don't know today what the best way to address that area is. More tests have to be performed there, and we will do that just as soon as the EPA will let us. CTS

stands ready to work with the EPA to evaluate the progress of the interim plan and its impact on the rest of the site. We will also continue to evaluate the site conditions and perform the risk assessments to develop a site-wide remedial approach by scientific data and analysis. We know the residents continue to be concerned. It's important to recognize that because of steps that we've taken with the EPA there is no exposure to contaminated groundwater. A vapor extraction system at the eastern springs ensures that the indoor air is protected. The levels of contamination in the soil meet EPA guidelines. As we proceed with this interim plan we will work with the EPA and continue to monitor and analyze so that the community continues to be protected. CTS is committed to addressing the site and conforming with EPA requirements. This is why we want to get to work now, and why in 2014 we proposed taking an interim step to address the source as quickly as possible. This is not going to be our last effort to address the site. It's a next step. We look forward to working with the EPA and the community in the

future. Thanks for your time.

BY MR. YOUNG:

Thank you, Mark. Just to recap. I'm going to have a microphone here, so -- and Angela is going to have a microphone over there. If you have any questions, please come on up and I'll take them one by one. I do want to point your attention to the fact that this auditorium closes at 9:00, so we really have to be out of here by 9:00. We have to -- we hope to adjourn the meeting no later than 8:45. So keep your questions and comments short. You have three minutes. So we'll take the first question.

BY MS. MILLER:

Remember to state your name before your question or comment.

BY UNKNOWN SPEAKER:

And spell it.

BY MS. MILLER:

And spell it.

BY MR. AGER:

John Ager, J-o-h-n, A-g-e-r. My question is, I was interested in the process that you go through with the state agency, which is now

the DEQ rather than DENR. And I was wondering if you had any preliminary information from them about which of these remedies that they -- you know, that they care about.

BY MR. ZELLER:

Yeah, we've been in frequent contact with them. You know, we talk to them quite a bit. They review all the same stuff that we're reviewing. Other Superfund support agency. And they strive to get -- they're onboard.

BY MR. YOUNG:

I see that the state reps have joined us and they're sitting all the way in the back there, if you'd like to ask questions later on. Well, any quick questions, any comments?

BY MR. SULLIVAN:

First I have to tell you my name is Rick Sullivan. I grew up in Cecil County, Maryland on the Little Elk Creek Superfund site. I'm the oldest living member of my family. I've had cancer a couple of times. I bought some property here in 2013, retired. About 10 acres not far from CTS on Pinners Cove Road. The day that we closed, October 11th, 2013, instead of going up (inaudible) Road I came

down Pinners Cove Road and hit Mills Gap Road and saw a news crew. Didn't know what was going on, so I pulled over and asked and I found out that there's a Superfund site. So my first question is, why is it known as Asheville's dirty little secret, and secondly, is there anybody from the city -- city counsel, councilmen, that's wanting to help protect their citizens here tonight. And my main question, why are they still allowing real estate companies after real estate company to list properties near infected property 500 feet from the main gate without disclosure?

BY MR. ZELLER:

Well, I guess -- I guess we don't refer to the CTS Asheville site as Asheville's dirty little secret. We've been working at this really probably, what, two decades, so it's not secret.

BY MR. SULLIVAN:

In 2004 the Mountain Express used that term.

BY MR. ZELLER:

Okay. With regard to your second question, can you help me out? Your second question

was?

BY MR. SULLIVAN:

The second question is, is there any city council members here, people that are running for city council or representative from the city to help represent the constituent? Anybody from the city?

BY UNKNOWN SPEAKER:

It would be county commissioners right here.

BY MR. SULLIVAN:

Everybody needs to be made aware. I would have never bought the property growing up on a Superfund site and losing my entire family. So I'm 50. I'm the oldest living member.

BY MR. ZELLER:

And from the real estate standpoint, we don't have a lot of -- lot of tools in the toolbox that -- that's private business. If they want to list property and sell property, there's not a lot of control I have on that. What I can control is to make sure folks are informed. And I have, since I've been involved, at least, you know, since January this year, I've talked to a lot of people that want to move into Southside Village, a lot of

people that, you know, want to move to Southside Village, a lot of people want to move into the Mills Gap Road corridor, and I've had a lot of conversations and there's letters we can write, and there's some things that we can do to alleviate concerns.

BY MR. SULLIVAN:

The fact of the matter is, all the real estate -- realtors know. It's just quite simply -- it's a listing. Do everything for the listing. The hell with it on the back end. It's not really fair. And until we get the Asheville Board of Realtors, the State Board of Realtors who I've already approached over this, and then the realtor that sold me the property, Town and Mountain Realtor, stated that they knew nothing of the CTS. According to your preamble as a real estate agent is to know your area. So I find it unfathomable that he didn't know he sold me a property near a Superfund site.

BY MR. ZELLER:

Well, there's some -- I appreciate your concern. There's some good news here. The fact that over the number of years that we've

been working on this thing we've got the risks under control. The big thing -- the big risk was this TCE over here. Right? The first risk to be concerned about is groundwater ingestion through drinking water. And so, through 2012, 2014 the water filtration systems, Buncombe County has run the waterlines for us. We have -- now we have people drinking clean groundwater. That's a great thing. The other pathway we need to be concerned about, of course, is the air pathway. We have an issue on the eastern springs area that we were concerned about that required remediation. That system now is working great. The folks moved back in their homes after about two months. They moved back in about November of 2014 before Thanksgiving. So now we've got the air issue taken care of. So the big exposure pathways that we would worried about, ingesting drinking water through groundwater wells and air ventilation pathways, have been addressed. So we feel real confident and real comfortable with that. Now, do we have work to do here, sir? Absolutely. We're not done. This action is a

step in the right direction. Is there another step, maybe a couple more steps required? Absolutely. So I do appreciate your -- you know, real estate -- some of the real estate values and depreciation and appreciation is something that we hear a lot about from all these Superfund sites we travel to. But all we ask is that, you know, when we're done here we're going to be clean. And at that point in time there isn't going to be no little dirty secret. And we're really excited about this electrical resistence heating, because it's -- it's really the closest thing that we've had to a silver bullet since I've been doing this. We haven't had -- thermal treatment used to be so expensive that we couldn't get anybody to pay for it. That includes the US taxpayer. EPA, on the behalf of the US taxpayer, wasn't doing a lot of thermal treatment because it was just too darned expensive. But now the cost is coming down and we have, you know, a remedy here that we know is going to get us 95 percent reduction. I'm pretty sure it's going to get us 99 percent. Now, that's a great thing. That takes us a long way -- does it

take us all the way to cleanup? No. Does it take us a good way down? Yeah, and we're excited about that.

BY MR. YOUNG:

I guess we have our second question coming up. I'm going to take this question first and then we'll go to that gentleman.

BY MR. McQUEEN:

My name is Tate McQueen. I'm an educator in Buncombe County. First -- this is the first time a gentleman from CTS has been here. I know that he's left the room. I'd like to convey shame on you. Shame on you. I guess after the loss of the United States Supreme Court against the company with the support of the Department of Justice arguing against us, that now they feel emboldened to come here and talk about how hard they want to work for us, give Matt Wallace a wink after the speech, without referencing any of the victims. Those that were actually impacted. Those that are sitting here. And only talking about those springs. Those have peoples' names attached to those springs, and the lungs that are breathing the air off of the springs belong to

the Rice family and the Robinson family. We've had many fights, many struggles. In some cases 30 years. What they didn't tell you is that all of this was known to be migrating in 1990. What Franklin Hill won't want to talk about is the sampling tests that were changed and the fact that they approached and went onto a private piece of property and took samples without the family's knowledge, without informing them of the results. And this goes on and on and on until we get to 1990 or '99 where they've had nine more years of exposure and the damage has been done to their family and their family members. We have other families. Mr. Sullivan, who also are amongst the last of their family, so we can commensurate with you. And as a realtor there are laws in place that say realtors have to give that information. And when we talk about the SVE system, it wasn't shut down by the EPA or MACTEC, it was shut down by (inaudible). There's been zero mitigation of the source since the summer of July, 2010. Nothing has been done, except for after the fact measures to the exposure pathways that

were impacting our community. I'm going to finish my point and then I'm going to step out of the way. And the only reason why I jumped in line is because I want to see this gentleman's eyes after going over to the United States Supreme Court against him and his proxies. So this is an opportunity for me to get that off my shoulders and I'm going to take that opportunity, because I'm going to convey to you just how we feel about what's been done to us, and continues to be done to us, because it's 2015 and we're not talking about doing anything until 2016. So that makes it 26 years since it was first discovered. Now, I don't know what else you would need to expedite this process, but to continue to watch people get buried in our community is inexcusable. We deserve better. We didn't need these peoples' misery coopted. We didn't need people coming into our community from out of state asking for bank account numbers to exploit the victims. It's happened enough in this community. We demand better. We deserve better. And what this guy did to show up here is indicative of the

disconnect between what we need and what we've received. They can't even mention their names when it comes to the properties that are being damaged. I want you to see my children. They're over there as well. Because we have contaminant in our water. So it's not just some kind of a theory here, well, we're working hard to clean that up.

BY MR. HILL:

I do want to say something tonight. First of all, I'm Franklin Hill, Superfund division director, region 4. And what I want to say is that we know that this site has a long history. I also want to say that, you know, there isn't a dirty little secret. We've been working very hard to address the environmental issues in this community, and we continue to do that. But what I also want to say to you is that we have to get to a point where we're going to move forward as a community. You know, the past is there and it's just that. It's just that. It's the past. What can we do about it. Except for at this very moment and this very point try to work to rectify to solve the issues that are at hand. We can't

continue to live there. We have to move this community in a positive direction. The gentleman that spoke earlier about real estate values, they are important to people in this community. The people I've talked to in this community who are concerned about real estate values. EPA is concerned about it. And the EPA's goal is to help improve those property values. To help protect the health of the citizens in this community. So we're here tonight to share with you the start of the cleanup in this community. Something that we haven't had for a long time. So what I'm asking for is for people to embrace an opportunity for us to move forward and have some sunlight or a bright star in this community as opposed to continuing to deal with the negative press, the negative innuendos, the grandstanding, and all the other things that I've witnessed in this community. I'm asking for your help. Your support to work with me and my team to move this forward. Yes, there's some controversy regarding how far to expand the cleanup. We are considering that. But we've always been

transparent with this community and we're being transparent now. And so, what I'm asking you to do is to decide tonight whether or not you're are going to move forward or whether or not you're going to continue to live in the past on this issue, because we need to move forward and we need to clean this site up and make it something that we can all be proud of as opposed to continuing to deal with the past issues that no one in this room can do anything about, folks. We have to move forward. We have to get to a good place. We're getting good scientific technical advice. Good ideas, good suggestions. How are we going to make people happy and proud about what we're doing in Asheville. How we're going to make people feel good about their property values. Those are the things that we're concerned about. We're concerned about bringing a good remedy to this community, and we're going to continue to do that. The EPA is committed to that. I am committed to that, and this staff is committed to that. So I thank you for your time this evening.

BY MR. YOUNG:

The next question. State your name and spell it if you would.

BY MR. MARCH:

Good evening. My name is Dan March. It's spelled like the month. I've got a couple technical questions. I understand you're going to go to the source and you're going to put a one acre treatment facility on the source. I'm not hearing anything like a pump and treat or putting up walls, or anything else to keep things from migrating further off the site. I'm not hearing a time table for that. And really that's -- that's a great -- it's a big hole that I see that you have. I've just not heard what you're doing about that. So if you could tell me about that, please. Second issue -- or the second question has to do with DNAPL. So how deep are we going with the treatment -- the thermal treatment, or the thing's going to bring the solvents up and out of the ground 10 feet, 20 feet?

BY MR. ZELLER:

Let me address your second question first.

That's the easiest one.

BY MR. MARCH:

Well, I have three questions. I didn't want to take up my three minutes --

BY MR. ZELLER:

No, that's okay.

BY MR. MARCH:

-- with you talking.

BY MR. ZELLER:

Go ahead. Sorry.

BY MR. MARCH:

So my issue is DNAPL. I'm concerned that your treatment might not get down to the point where we've got DNAPL down in the fissures in the substrate rock. And the third question has to do with the RCRA trial burn. And presumably you're going to have to do a RCRA Part B trial burn for the thermal oxidizer if you're treating stuff onsite. You're not?

BY MR. ZELLER:

No. This is under CERCLA. We have to meet those substantive requirements of the various environmental statutes.

BY MR. MARCH:

I thought you were for the RCRA group though

right?

BY MR. ZELLER:

I'm CERCLA.

BY MR. MARCH:

I'm sorry.

BY MR. ZELLER:

Superfund has an exemption for these permits. It doesn't mean I can just thumb my nose at all the other applicable environmental standards. So yes, am I going to have to meet state air quality standards on the top of that catalyzer? You bet I am.

BY MR. MARCH:

Well, I know that the folks had to do the RCRA, the CERCLA and the TSCA. So is TSCA going to be a part of the oversight as well here?

BY MR. ZELLER:

TSCA is PCBs. We don't have PCBs. But yeah, I promise you that whatever comes out the top of that stack, whether it be a carbon stack or the catalyzer stack, it's going to meet the State of North Carolina air quality regs. I have to meet those.

BY MR. MARCH:

And you're going to be able to calculate your overall 95 percent goal of treatment to removal from the site by monitoring the amount of material that's going through your treatment site, so you'll -- you'll know how many tons actually came out?

BY MR. ZELLER:

Well, that could be max. Yeah, I could take max out of that.

BY MR. MARCH:

And you know what the max is now under the site?

BY MR. ZELLER:

Well, that's -- you bring up a great question. There's lots of ways to measure success of these remediation systems. We're talking about thermal. One of them -- one of them is max. Now, we've been warned by experts who have been doing this for two decades don't do max as far as a -- I've got two tons now and I'm going to allow 10 pounds at the finish. We've been discouraged from going that way. And AMEC didn't purpose that. What AMEC proposed, and what actually my people -- my thermal experts that I rely on, are advocating

the approach -- the AMEC approach, which is a 95 percent reduction as based on pretreatment concentrations and post-treatment concentrations. Now, what we'll monitor, as I mentioned earlier, we're going to collect pretreatment samples of saturated soil. All right? Material that's in the groundwater. We're going to collect groundwater samples pretreatment from this one acre block, as well as NAPL, and that will become the -- let's say that -- let's just do the simple number. That that's 100. Okay? So now I know that's my starting concentration. And I know that I won't be able to turn off the electrodes and the power until I get to five. That would give me 95 percent reduction. Right? And so, I'm going to have to then at some point in time sample. When I think I'm getting close, you know, I think my eggs are almost boiled, I think I'm going to have myself some egg salad sandwiches, before I start doing that I need to go out there and sample the saturated soil, groundwater and NAPL to make sure I'm at 4.9. If I'm at 5.1 I'm at 94.9 percent. I haven't got there. Okay? So I've got to get below

that level. So that's how we'll do it. And that's how most of the folks that I've been relying on for technical support advocate the pre and post concentrations. So let's go back to your question about the wall. Rachel, can you go to that figure that's got the plume on it, please. Keep going forward. Keep going. Keep going. Keep going. Keep going. A little more. All right. Everything you need to know is on one picture. A picture is worth 1,000 words. I am really convinced, and all my team members are convinced, CTS is convinced, AMEC is convinced, all my folks, that this electrical resistence heating on this one acre blob is going to give me 95 percent reduction. Probably more like 99. Over a five month -- if I have to give it six months, so be it. If I can do it in four months that would be good. But I don't know how that's going to work out. But now what it will not do -- and this is why we've been trying to pick up our nose a little bit, our chin down the horizon a little bit. It's not going to address this TCE mass at the well pare 6 and the well pare 7. Now, will it

reduce it from 60,000 to maybe 6,000? Possibly. We're going to probably get a little heating up there. I might get some reduction up there. But am I going to reach my magic target of drinking water standard which is the North Carolina number as well as EPA number of five? No. No one sitting in this room is telling you that we're going to heat this blob and we're going to effectively treat this TCE out here. No, it's not going to happen. Will it reduce it? Probably so.

BY MR. MARCH:

No, but it'll migrate off the site.

BY MR. ZELLER:

It could.

BY MR. MARCH:

It's just we won't get more concentrated from upstream.

BY MR. ZELLER:

Now, with time, if you were very patient -- and you have 30 years patient. I think you've been patient enough here. But with 30 years of time, if we cut off the head of the snake this would start to decline with time. And I'm talking a lot of time. But you know,

we've stated in correspondence, sir, that if left untreated, this TCE mass at 6A will continue to migrate to the eastern springs, and this untreated mass at 7A will continue to migrate to the western springs. We are keenly aware of that. Now, is the ultimate treatment over there, reactive barriers, slurry walls? I don't think so. Once you put up a slurry wall you're trapped into long-term groundwater recovery. For a plume that is relatively manageable, relatively small, I think your answer there may be expand the treatment area for ERH and just get it over with now. It might be a combo. It may be treat this with ERH, and this might be a ISCO issue. The difference -- this is interesting, because now we have groundwater contamination for watertable all the way to the bedrock here in this one acre blob. A little bit different here. Most of the groundwater contamination at 6A is way down deep in what they call that partially weathered rock zone, or that highly transmitted zone, which is, you know, the highly weathered saprolite. If you look at the MIPs on that that trace the TCE, I've got

to clean it, clean it, clean it, clean it, until I get down deep and then I've got all this action. I've got a lot of action. So it seems that most of the TCE mass here is down deep on top of that rock. So it might not make sense to firmly treat 40 feet of saturated soil there when I could maybe just zap that. So it's possible that it might be a heat this, ISCO this. But yeah, so we're not thinking reactive walls, per se, over here. You know, we tried some ozone back in the day. Ozone treatment where you bubble in 03 to try and get that stuff to speed up the decornation of it. It didn't work. We did some ozone in here. I've tried it with other projects. It didn't work real well.

BY MR. MARCH:

I have a follow-up question. Basically you just told me you don't have any methodology to keep things from continuing to migrate off the site. Is that what you just said?

BY MR. ZELLER:

That eastern springs -- no. What I said is that this thermal ---

BY MR. MARCH:

You said you don't have any idea of removing any of the material from around 6 -- the cluster of 6 or 7. You have no plans to keep that from continuing to migrate off the site to other peoples' property; is that correct?

BY MR. ZELLER:

This interim remedy does not address ---

BY MR. MARCH:

I understand that. I'm down with cutting off the head of the snake. I think it's great. It's this other part that I believe is -- I haven't heard you tell me what the remedy there is.

BY MR. ZELLER:

This eastern springs remediation system is going to have to stay operational for a reason. And that reason is because we have a contaminate mass at 6A that's ---

BY MR. MARCH:

But that's at the spring, correct? It's not keeping it on the initial property. It's ---

BY MR. ZELLER:

That's correct. It's treating it where it's coming out of the ground. That's correct. Is it ideal? No. I agree with you.

BY MR. YOUNG:

Let's move on to the next question.

BY MS. HICKS:

My name is Katie Hicks, K-a-t-i-e, H-i-c-k-s. I represent Clean Water for North Carolina. We're a statewide environmental justice organization. And we will be submitting some written comments, but I just wanted to go ahead and go on the record this evening in support of going ahead and addressing that area to the north. As the gentleman was just saying, it doesn't make sense to not address an area that is a significant source of offsite migration. But we've already heard about people in the community suffering. It just seems to me, and based on what I've heard this evening and read in the plan, that EPA doing what is necessary to go ahead and address that part of the site concurrently now. Doing that sooner rather than later would be the best thing to do. I also have -- I think you answered a lot of my questions. But I just wondered with the air monitoring that will be done to ensure that vapors aren't escaping during the heating process. Is there

any way that the community members will be able to access that data so that they'll know if, you know, there is some spike in air contaminants?

BY MR. ZELLER:

There will be air monitors set up. Those air monitors are 24/7. They're continuous. I don't believe you'll have a link to read those realtime from your -- as you're drinking coffee at 8:00 in the morning. But all that -- any remedy performance monitoring data that we collect clearly will be part of the administrative record. All -- just like all the monitoring well data that we collect. All the air monitoring data that we've been collecting from the adjacent properties. Yes, that all will become part of the -- clearly the remedial action report. But believe me, there's no one more worried or interested in ambient air concentrations coming off that thermal treatment unit than me. As well as the thermal treatment contractor. I can't send a toxic cloud over -- what is it, 28803 zip code. This Moog facility that I talked about, they have 400 people there that are

operating, they are working eight hours a day. There run two shifts. Two eight hour shifts. I asked them this specific question when I was there in September. Are you all monitoring air quality for your workers. They said yeah, you know. But they've not seen a problem. So they have 400 people sitting there working every day, you know, which is -- would be worst case scenario. At least we have a buffer. Thankfully we have nine acres vacant and, you know, we have access to it. Obviously we can't release stuff to the west, north, south, the east. But we will be monitoring that and that data will be a part of the record. But the whole thing will be under -- the whole treatment area will be under negative pressure. So think of a tent. Think of a subsurface tent. This will all be sucking in to make sure that anything we pour on that ground is getting captured in perforated pipes.

BY MR. YOUNG:

Let's go to the next question.

BY MR. WILCOX:

Thank you. My name is Jeff Wilcox. So I like

the analogy of cutting the head off of the snake. Why is the snake drawn at this one acre boundary on the -- what's called the VOC plume core which is -- I'm not sure why the dots were drawn where they are in here. And why couldn't wells 6 and 7 be considered part of the head of the snake and get the whole head of the snake at once rather than getting part of the head of the snake and then saying we're going to come back for the other part of the head of the snake?

BY MR. ZELLER:

That's a great question. This snake here came out of that focus feasibility study work that was done, and the report was issued May of '14. It comments on the record in October or November of '14, before I got associated with the project, it's pretty clear in the record that we at that time, the EPA and the folks that were working on the project at that time, were not only concerned about the one acre but 6 and 7. We were bringing ---

BY MR. WILCOX:

So they consider well 6 and 7 part of the head of the snake?

BY MR. ZELLER:

So in October and November of '14 we were having conversations, not unlike the conversations we're having right now, is that gee, it's great to go after this one acre, but what about this stuff to the north. There was a lot of consternation. There was a lot of we want to focus on the commingled NAPL, the fuel oil that's got high concentrations of TCE. There are, what, 6,000 PPM generally speaking, you know, TCE commingled on this. So it's really high. As opposed -- this is like 60 -- so it's the highest, and this is pretty high. In our comments that we issued in October, November of '14 it was kind of the same stuff, Jeff. It was in the interest of moving forward go ahead and put together some remedies to look at this one acre area. But we're not forgetting about this other stuff. We won't forget about that stuff until it get addressed.

BY MR. WILCOX:

And did you -- in selecting the ERH did you consider the pump and treat, and then at least pump and treat it would pull some of that back

from well 6 and 7 rather than ---

BY MR. ZELLER:

It could.

BY MR. WILCOX:

--- spread offsite?

BY MR. ZELLER:

It could. I mean, but until -- at 60,000 PPM -- I got a job as big as South Carolina I've been pumping on since '97. I got a well that's at one PPM, PCE and TCE, and it hasn't went down in 20 some years of pumping that. How long is that now, 18, 19 years. So containment, yes. But is it going to take me from 60 to five PPB? Huh-uh (negative). It's not. I've got to have something else. Pump and treat might be a good short-term solution for offsite migration. But now that I have -- this remediation system, again, is not ideal. It is treating, as this gentleman said, I totally acknowledge that it is treating the problem before it comes up to the ground surface. Is that where I need to be treating that from a long-term perspective? No. I need to treat within that fence line. That's where I deal with environmental impacts, so I

don't land it on somebody's private property. I understand that's a problem. Right now that's a short-term solution that allows that air to be safe for folks to breath down there.

BY MR. WILCOX:

But I'd encourage you to address the entire snake's head, which includes well 6 and 7.

BY MR. ZELLER:

Thank you.

BY MR. YOUNG:

We'll take the next question.

BY MS. CARSON:

I'm Laura Carson, L-a-u-r-a, C-a-r-s-o-n, and I live in Southside Village. Craig, earlier I heard you speak and I thought I understood that if you had enough comments from the community that that would give you a leg to stand on to go to CTS and say, you know, we're going to do these other two locations, 6 and 7. But then I thought I heard the gentleman from CTS say, well, you know, they had to study those two sides and they didn't know how they could clean it up. Maybe I misunderstood what he said. But if we could get everybody in this room and all our neighbors to write

him a note, I mean, will that help you?

BY MR. ZELLER:

Clearly the community acceptance is our night's -- our night's final. It's why we're here tonight. Like all these cleanup jobs we're here to fully consider. All those comments that we hear. This is obviously, to us, has become a central theme. And it's really -- it's not a new thing. I mean, again, if you look at the records it would be clear. In October, November when this FFS report was issued in May of '14. We're not going to forget about this area. So we have some important -- we have some important decisions to make in my division, you know, me and Franklin and our legal counsel is what battle do we want to fight. We have CTS under an obligation when this site-wide AOC that was issued January of '12 to take care of all this. Obviously I've got to address not just the blob but what's at 6, what's at 7, what's at 5, what's in those two surface water streams on the west and the east, before anybody can call this thing a victory. Now, do I do that now or do I do that, you know, in

one big giant swing of the bat, or do I do a couple bumps. Do I do a bump to get on base, get that runner over and get him score and get him home. So I have to make -- we have a lot of decisions to make in the next three months based on comments we receive tonight through the comment period. If I -- if we did -- all right, say it's two acres or bust, that leads to lawyers. That path, no question, leads me to a room full of lawyers.

BY MS. CARSON:

CTS's lawyers.

BY MR. ZELLER:

Or my lawyers, too, all right. Because we're going to have to figure out a way -- believe me, we're thinking about this. That's why we're -- you're know, we're evaluating feasibility of this, is where does that lead us. We're pretty sure that leads us to a room of lawyers. EPA lawyers, CTS lawyers. What's that going to do? Is that going to speed up cleanup or is that going to slow it down. That's going to slow it down. I think we all agree that it's going to slow it down. Now, is it a short-term slow down if I can get the

two acres through lawyering up. Is that worth it? Might be. Or do I take what I can get, or do we take what we can get and fight another day. Those are the kinds of decisions that we're having to kind of bat around inside of the head. Talk to our lawyers. There's a lot of important consideration here. We don't want to be in the way. This community, I get it. Franklin said this. It's waited long enough to get a cleanup started. We understand. So we don't want to be -- we don't want to kind of step on our toes here and take some legal battle that's going to delay a cleanup that is needed. This one acre cleanup, nobody is going to sit here today, a rational practical thinker and say that doesn't need to be cleaned up. That clearly needs to be cleaned up.

BY MS. CARSON:

It seems that our comments are no good.

BY MR. ZELLER:

No. Actually, quite the opposite. Your comments are extremely important. That's why we're here tonight. That's why we have the court reporter and that's why we have two

microphones for you to put your comments on the record. It'll be part of the decision, as well as your opportunity to write us a comment. So it is exactly why we're here tonight is to get those comments and say, you know, we've been in this community now for a long time and we're going to be here until we get this thing cleaned up. We're not going anywhere. I am not forgetting about 6 and 7. We haven't -- we've been talking about 6 and 7 since October of last year and it's October of '15 and guess what, I'm still talking about concentrations of 6 and 7 needs to be cleaned up. So our thoughts have been well documented in the Asheville Citizens Time. The reason we're pushing in concept for this now is because it's cheaper. Everybody has probably said at one point in time in their life it's easier to do it right the first time. Right? In this case, if we're going to boil this entire two acres it would be cheaper to do it all now. Clearly it would be cheaper to do it all now. But I've got to have somebody pay for it all now. That's another consideration. Four million dollars is on the table. Do I

just push those $4 million chips away and say I don't want that, or do I take those chips off the table and say thank you and go back and get $4 million later. I get all the kind of stuff that we're having to put on the record to kind of process. Part of our -- and what's helping us process that is exactly the feedback you all are giving us tonight. This has been very helpful. So we appreciate the feedback.

BY MR. YOUNG:

Let's take a question on that side of the room and we'll come back here and answer questions.

BY MR. TAYLOR:

Hi. May name is Robert Taylor, R-o-b-e-r-t, T-a-y-l-o-r. I'm a resident of this community since 1954. I owned property at one time in Pinners Cove and I own property in Merrills Cove. I've had friends -- I'm really good friends with the Rice family. I'm one of the 13 people that was moved from there because of the air quality. What I want to address is -- it's great that they're cleaning this stuff up. But it's been 16 years since I found this -- and it's really difficult for anyone to

move on and put this in the past when you've lost loved ones. You've lost friends. You've lost family. And moving forward doesn't address the accountability of CTS for not being responsible, being a corporate citizen, and they're criminals and they need to be accountable.

BY MS. RICE:

My name is Dot Rice, D-o-t, R-i-c-e. I just wanted CTS to see me and to understand that I am living in this every single day.

BY UNKNOWN SPEAKER:

He left right away. He left. He just walked right out. When he was done he was gone. I'm sorry, Dot.

BY MS. RICE:

I just want him to see me and to go back and to tell CTS that we are living every single day -- my husband is disabled. I have -- I'm not going to live long enough for you to finish all that, Craig. What you're talking. I am east side. I am the springs. And I am not a spring chicken to live and wait for this. And I have family that is sick on that property, as you well know, and I think that

CTS needs to see that the whole quarter is cleaned up so we can feel safe in our community. If not, if you don't want to do that now, buy us out. Offer us something we can go (inaudible - applause). CTS has never even told me they're sorry.

BY MR. GARRISON:

I'm Jacob Garrison. My question is -- I heard Craig say that -- a couple of times that there will be (inaudible) in the administrative record. My question is, when will the administrative record -- when will the complete full administrative record be publically available? There have been administrative record that has been available when it was (inaudible) from Craig's emails and from the director.

BY MR. ZELLER:

Well, obviously we're required to have a complete and unabridged version of the administrative record available. The proposed plan that I sent out in October 1st and September 30th on our continued participation section it has a link that -- our AR, admin record, are available online. So if you click

that address ---

BY MS. MILLER:

I'll can give you that link before you leave.

BY MR. ZELLER:

Everything supporting this particular decision document, the proposed plans for this one acre area, is all there. Now, we've got a bigger site-wide administrative record that has probably, what, 10,000 plus pages.

BY UNKNOWN SPEAKER:

62,900.

BY MR. ZELLER:

62,000. Now, that's been available for some time. I know historically there's some allegations of missing pages. And I got to be honest with you. That's before my time and I'm really not qualified to address that. Other than the fact that this stuff is all publically available and everything that we have is out there.

BY MR. YOUNG:

Before we get to you I do have one more question over here, please.

BY MR. DURANE:

Let me introduce myself. I'm Barry Durane. I

was (inaudible) confirmation sampling plan several years ago. And that was a very interesting experience. First of all, I appreciate that you're here. You look like you seem to be really proactive on this. You're probably the best person we've had here to-date and I appreciate that. Also, I think this initial approach to deal with the source is a good one, but, you know, here is the conceptual flaw in the concept. It looks like we're doing something that is a -- this is a dynamic process that's occurred at this site. It's moving all the time. That was the primary source way back at least as far as 2002 when you identified it clearly. But the bigger concern here is not the NAPL TCE plan right now. It is deeper flowing DNAPL source material that happens to be -- and this is what was unique about this site from the beginning. The location of the source was at a topographical high. The contaminant that had 16 times the weight of water and was in this water and in the fractures and fissures of the bedrock. Unfortunately there's an admission here that some of this is new and

we'll have to do this in a phased approach. We're sort of moving backwards unfortunately. We're going back to what we should have done several years ago. We're addressing the source area that no longer necessarily is the source area. You have a situation here where you have the virtual effect of relocating barrels of TCE that can travel down the fissure, relocate hundreds of feet away, maybe thousands of feet away, and become another local source of contaminated groundwater, and I've heard nothing of effort -- any effort, we may be past that point, where you can actually physically do something about it. But an effort at containment whether it be a permeable reactive barrier. Some way to contain this. One of the things I also want to mention in terms of flaws is sampling, as you know, is everything. Where you sample is in your reports of where the contaminant is. And it's very interesting on your graph here you show that groundwater -- groundwater is going in two directions. The bulk of the sampling is done on one side, and there's been almost a complete void of sampling on the

northwest here. And I'm just going to add one little part of the equation. Somebody mentioned at the beginning about Asheville's dirty little secrete. And I'm going to ask this question because there's a very interesting coincident of timing. In 1987 Gerber Baby Food, which is about three-quarters of a mile down in this direction at the bottom where some of that contamination would have gone to, they actually started using groundwater wells for a certain period, and they pulled up their operation, and operable operation, right next door. And I'm going to ask why there hasn't been any sampling in the northwest, and why to this day there isn't sampling. And why, and since Franklin Hill is here tonight -- I know he wrote a letter to Southside Village and he said you're all clean and good this site and we're not really concerned about that. Yet, there hasn't been a sampling. So how can someone make a decision by fiat, a declaratory statement of homeowners association telling them that everything is clear when they haven't even done the science on that. So I'm

glad you're doing what you're doing. But I admonish you, or encourage you to look at containment things for the future. The real source concern here is that TCE DNAPL that's going to get in the fractures and fissures and going to migrate in the -- an offsite concern. So anyway, that's not really a question, but I just appreciate ---

BY MR. ZELLER:

Thank you. I'll take away two things from that. Let me address this. Deep ground water is -- you're right. This action that we're talking about tonight does nothing for deep groundwater other than the fact to eliminate all that pressure, that leaching that's coming off the overburden that's potentially a source getting in the deep groundwater. So we are eliminating, taking a lot of pressure off the deep groundwater transport pathway that will restrict the amount of mass getting into those cracks, those fissures of that fractured bedrock. The good news is now, because of the waterline installation and filtration, nobody is drinking that deep groundwater. So exposure is controlled. That's what we have

to do short-term. So I hear what you're saying about the groundwater, deep groundwater, and that is something yet -- we have another nut we have to crack. Now, great question with regard to western -- the western -- what we call the characterization effort. When I say western, it's this -- the majority of the stuff, you're right on, Barry, wants to go to the east. And that's why we had to put a remediation system over there in the Rice family area to take care of that air issue. Now, but there is a component that wants to flow to the west. It is of a lesser magnitude of impact. But nonetheless, there is an impact here. This monitoring well we've been talking about, 6, it's interesting. We've had this debate with some other folks who have been looking at this data. At 7A which is 71 feet that sits on top of rock, that's about 53 parts per million. It's all in the deep. But when I get to five, which is the last well as it slides off to the west, it's all shallow. In the 5 well I've got 4,500 PPB, 3,500 PPF. So I go -- this is about less than 100 feet. I go from 53 PPM to like 77 PPB. So

something's happening there. I've got a little ball that it just kind of wants to stay that deep. But I've got data that shows I've got something coming off the shallow. Okay? When we wrote that letter to Southside Village March 9th of this year, it was very clear that based on existing data -- based on existing data that was summarized in that 14 page letter, we do not feel there are unacceptable risk codes to residents of Southside Village. That's primarily based on two reasons. Why? Everybody's on city water. Two, we had air data at the time, still do, that says there's no unacceptable risk of indoor air to people living in Southside Village. That's why that letter was written. But then the third thing we said in that letter is based on existing data we also know that characterization work over there is not done. All right? So we -- when we wrote that letter we knew that was a data gap that had to be filled. We picked up the phone and talked to CTS. We said, hey, would you all mind expediting the characterization work that we all know needs to be done on the west, and they said yes.

And they gave me a work plan in, I would say, like April-ish, May-ish. All that data was collected right before and after the 4th of July holiday. We're still kind of wrapping up some of that. But I actually did this past week, I believe it was mid last week, I actually got the western -- what we call the western characterization report. I need to read that, and I need to get it in the administrative record. I didn't bring any slides of that today, but I can tell you it was a really good effort. What did we find? We found some really good things. Guess what? I've got some TCE bleeding out of that stream. I knew that. It's about 100 to 200 parts per billion, when in fact I had thousands pulling out here. So I don't have the subsequent air issues that I have in the eastern. It's a little -- it's much less concentrated. I had some really good news is that we punched a bunch of holes along Mills Gap Road, and I've got clean groundwater. I have thankfully -- every now and then you get a little lucky in this business. I don't have any groundwater migrating north of Mills Gap Road. I've got

clean groundwater here on Mills Gap Road. I put two wells down -- we put two wells down on the closest street to this spring, which is called Silk Tree Lane in Southside Village. Again, ground water underneath Silk Tree Lane, clean. What we got going is kind of what we thought we got going, we've got a shallow groundwater plume that's running down this little hollow. It's doing what groundwater in the Piedmont does. It's coming out of the ground, popping it into that spring, and it volatilizes off. So your point is well taken. We realized about six months ago we had to -- CTS stepped up to the plate. That report just came in. It's hot off the press. Unfortunately I haven't had a chance to even crack the cover of it yet because I've been busy getting ready for this meeting. But when I do have time, I get a chance to review that report, if I have any comments I will make those changes. But as soon as that's released for the public it'll be out there. And I'll be happy to come back here in two months, whenever necessary, if people want to talk more about what's going on in the west. I'll

be happy to have that conversation or share that information with you. Perhaps, Angela, the best thing we might do, make a note of this, is our next community update we probably should talk about the western report and make it available and get it out there. But it's really good. We were very pleased. It was a good study. There was about 12, 13, 14 holes punched in the ground. We're going to end up putting in about probably four permanent monitoring wells. It was air monitoring as well as five (inaudible). So it's good stuff.

BY MR. DURANE:

Can I have just one quick follow-up?

BY MR. ZELLER:

Yeah.

BY MR. YOUNG:

If it's quick.

BY MR. DURANE:

Briefly. Briefly. You mentioned the reason why you didn't want to -- you'd run into a wall of lawyers and have to slow things down. And I'm going to ask you a very point question. Is the reason why you're not explaining because you've already run into a

wall of lawyers. The thing I've been concerned about from the beginning, and I want to say this, is the history is the history. You know, there's some things in the past that we could move beyond. The concern I have is that EPA has the ability to use a stronger arm to compel CTS to do more than it's doing, than it should be doing and it should be doing regardless of the lawyers. It has some -- it has more leverage than I believe it says it has. And I encourage you guys to use that and to press on beyond the stage one. Because this is superficial in a way. It's not central to the real concern, which is the migrating TCE DNAPL in the bedrock.

BY MR. YOUNG:

Thanks. Let's move on to the next question.

BY MR. RICE:

Jerry Rice. I'm from Enka. I have members of family, about four of them, that is involved in this fight. And I have a real big concern, and it goes back to the director or whoever he was that come up here and what grandstanding he did. When we start talking -- I'm going to talk to the politicians. I'm going to talk

about everybody that's involved, because human rights is what we need to be concerned about. If you're talking about grandstanding, when Tate McQueen come up here and stated facts, whatever you want to call it, it wasn't for us grassroots people. You wouldn't have a job. You wouldn't be here. Because one thing about it, we got the ball rolling here with grassroots effort, and we found the lies, we found the deception, and we found everything else in the record, and that's the reason we're having to come back. It's not because you wanted to or are willing to. So I want to set the record straight. The grandstanding is on your side. Not ours. We're here for people. We're here for children. And we're going to stay here when you're gone. So the issue is when that Enka plant was formed down in Enka and all the contamination out there -- we got TCE out there right now. It ain't been addressed by EPA either. It's still there. And the county government knows about it. They're moving the college from out there because of the contamination. Who's heard that story. So whenever you want something to

be heard you'll come in. But here's the bottom of this. If you get us off of city water -- or put us on city water and you get the risk down, (inaudible) along with other sides of Buncombe County, they haven't even paid attention to them. Now, get down to the big concern that we have up here that we've heard. It's a great presentation. This man knows his business and he's talking good. But here's the bottom line. I have not heard nobody address it. Everybody tiptoes around it. If they're serious about this, I would like to see an absolute plan, a master plan, and it agreed upon by CTS, and that master plan describe every detail of every step and where we're going from this point, and if this is successful at this point in time that we reach 95 percent, we're moving to the next phase of it at this length of time and not say if we get there. Because up here, if you ain't got a master plan, you ain't got nothing. And the people are suffering. So take that back, and see if that's grandstanding. Get before the lawyers. I'd like to see you grandstand them.

BY MR. SCHNOOR:

My name is Derek Schnoor, D-e-r-e-k, S-c-h-n-o-o-r. I'm a student over at Warren Wilson. I've been there for, you know, two months. I transferred here from Minnesota. So I don't know a whole lot of background, but the general consensus I get is that, you know, it's all about money and bureaucracy and all that bull crap. But my question is, why is it that -- you had mentioned earlier that you weren't necessarily going to release the information to the public. I want to know why that wouldn't be a possibility. Why we have to wait until the end for a report. Because I feel like that's where a lot of peoples' issues are is that if they don't see that right away as it comes out that things could be omitted. And so, I want to know why it doesn't seem like a possibility to release it as the data comes out.

BY MR. ZELLER:

You're talking about air data when we're burning -- when we're heating up groundwater?

BY MR. SCHNOOR:

Air data and water samples together.

BY MR. ZELLER:

Water samples. Well, the first thing is, you know, I think we've come a long way with realtime air data, and realtime groundwater data. All that kind of stuff. It also has to be confirmed and backed up with laboratory quality data. And we have to have what's called QA/QC done on that. It's got to be validated. We've got to make sure that 1.35 PPM really means 1.35 PPM. It doesn't mean 0.9 or it doesn't mean 2.2. So there's a big problem with readable time data. It's great for the decision makers. For instance, I got off a $1.3 billion coal ash cleanup up in Kingston, Tennessee, and I had seven air monitors and we're reading dust values 24/7. I had people worried about -- the real risk of coal ash is breathing it because it blows out the stack. And I had to make sure that I was keeping this stuff wet, keeping this stuff vegetated. That a big wind gust off the east Tennessee mountains didn't blow a plume of coal ash dust into an adjacent elementary school. So I had realtime air monitoring data that was reading that stuff, so I could make

day to day engineering decisions about send that water truck over there and wet that stuff down. Now, those weren't hooked up to the county commissioners live feed. I mean that was for -- this is my job. You know, my job is to protect and look out for the environment. So you have some degree to trust my ability to do that. Now, when that data is validated, when I know it's 100 percent accuracy, yes. I am required and I will release that data. But in the meantime it's kind of a day to day I need that to work stuff. It's not -- we're not hiding it. We're not ashamed of it. We're not trying to play shell games with people. We're not trying to say air quality is good or it's bad, because ultimately the first step -- I can shut that job down. I mean, if I had bad air quality in that TVA Kingston project it was shut down. I had that authority. Same thing here. If I see a volatile organic issue popping off and heading to the east, west, north, south, whatever, I'll shut it down, or my contractor will shut it down. We have that authority. So I assure you that, you know,

again, we are here for adequate protection of public health and the environment. I'm not going to take a bad situation and make it worse. But I have seen enough data on this -- this thermal. I knew that we were going to get some questions from the community about, oh, my god, you're going to boil this material. I know what happens when you boil VOCs. You're going to get a big toxic cloud that goes over this zip code. But we're recovering this air, or this vapor underground. This stuff is going to be collected 40 feet below ground surface.

BY MR. SCHNOOR:

So kind of just the general thing is that you want to do lab reports first so people don't jump to conclusions?

BY MR. ZELLER:

Well, we have to -- take this back to the validation thing. This stuff has got to be validated before I can release it. We've been going over the same thing with the air data we've been doing on the Rice property on the west. We'll get unvalidated data back in like six weeks. It takes a little while to get it

validated. I can look at that and know, hey, we're in good shape or we're in bad shape, but I have to have that kind of set in stone number before I can -- it's also a legal thing. I've got to make sure that 1.2 is 1.2 -- really 1.2. It can't be .09, it can't be 2.7. It has to be what it says or, I mean, I get myself in a lot of trouble as well.

BY MR. YOUNG:

Next question.

BY MS. GARRISON:

Hi. My name is Ruth Garrison, R-u-t-h, G-a-r-r-i-s-o-n. My question is -- I'll make a comment first. I feel like I've been bounced back and forth tonight. If I actually listened to what I'm hearing as far as EPA is talking about, you know, if we advance beyond this and do this much more then we're going to have to go against all these lawyers. And, you know, if we do this, this is going to stop us. But there on the other side, from the guy from CTS that was standing up here. He's standing up here saying that CTS will do something to the effect of whatever EPA will allow them to do to cleanup is what I heard.

Now, my question is, if I was to actually believe anything I've heard tonight, are you all seriously at the EPA doing something to prevent CTS from expanding the cleanup? I mean, why ---

BY MR. ZELLER:

More is always better when it gets down to the Environmental Protection. Is this the first time -- I had a hypothetical question. Is this the first time that EPA in regulated history has disagreed over the extent of what cleanup. No. It happens regularly. PRP is wanting to clean up X. EPA wants to clean up 3 X. It happens -- plays out pretty much in virtually every one of our jobs. So to some degree what's happening here, the dynamic that's happening here to me is very familiar. It just happens to be Asheville, North Carolina and not someplace else. So some of the problem I inherited, you know. We had this conversation with CTS about -- when the results from the NAPL investigation came out in May, and if you look at the record, some of this has been reported in the news is that we were talking about the concentration of TCE at

6A, 7A in October, November, and we got -- we got the whole that's not what we want to treat. We want to treat this one acre. That's the focus is the one acre. And that's what we're going on for. Was that area ever approved? I think if you look at the language that's what the paperwork says. I wasn't involved. But now we've got ---

BY MS. GARRISON:

But what he's saying, that you all are not allowing him to do the cleanup that he wants to do.

BY MR. ZELLER:

If CTS came to me and said, Craig, I want to cleanup the area you've been whining about, you know, I'd love it. But this is what they want to do. It is a good step. See, all these companies that we work with, they all work very similarly. They have budget processes, too. They have shareholders as well. They have CFOs that say you have $4 million to spend for remediation of Asheville site this year. And that's why we have what we have on the table. I'm pretty sure that without CTS telling you this is that they

don't have $8 million right now. That's -- most of these disagreements aren't personal. They're financial. My guess is that they don't have those resources available right now. CTS all along, you know -- like I said, $4 million in cleanup, we can't just turn our nose up at it and say, oh, that's not good, because it is good. Is it the final solution? No, it's not. Would it be easier to do it all at once? Would it be cheaper and cost -- or take less time? Yeah. Only if you have that money. Now, you know, part of the calculus that we're going through is that if I lawyer up and decide I'm going to force feed somebody a two acre thermal treatment remedy, I better have some money to back it up. Or what I'm going to do is do this community interest service and not get into a fight with a bunch of lawyers. So believe me, there's a lot of this discussion that's going to be happening over the next couple of months in my building, and with our state counterparts as far as, you know, how much -- do we want to completely take over and start throwing apples, or are we going to take what we can get and fight the

battle later. I mean, those are the -- that's the calculus that's going through our head right now.

BY MR. YOUNG:

I'd like to make a comment on that. And I appreciate the confusion that you have based on what you've heard here tonight. But what I wanted to focus your attention on is the fact that what you are witnessing is the behind the scenes thinking that, you know, Craig is sharing with you what we're all struggling with. Some of the issues that we're struggling with. And he's laying it out on the table for you. So this is the moment that we're being extremely transparent with this community. Showing you what we're struggling with. The decisions that we're trying to do what's best for this community, laying it on the table, and asking for your input. What do you think. Because what you -- what you provide is may help us make that decision a little bit easier. So I appreciate your confusion. But understand, this is a struggle that we're dealing with and these are the kind of decisions that we have to make behind the

scenes.

BY MS. GARRISON:

It may be not my confusion, but the confusion that you all are -- the two of you are portraying.

BY MR. ZELLER:

We're not holding CTS -- like I said, if CTS would come to us -- I mean, we've already asked them. I think the language was strongly encouraging considering, and they said respectfully no thank you. And that's their prerogative. And then there's other options. We have other options to compel, enforce. Yeah, we have options. And they're all being explored and all those options are being turned over right now.

BY MR. YOUNG:

One last thing.

BY MS. GARRISON:

Yeah, one last thing. Just to let you know how I became involved with CTS is the fact that I live across the intersection from Blue Ridge Plating. And so, we are not done with Blue Ridge Plating, but I would love to see this same kind of thing ---

BY MR. ZELLER:

Yeah. I would add on this, you know, is that all of these cleanups, every one that I've been associated with in 25 years are -- it's not unusual, but it's very typical -- there's actually a fancy term for it. It's called adaptive management. I got the job, (inaudible) district. We were over there 14 years. We burned anywhere from eight to $10 million a year of that responsible party money. But they couldn't spend -- I think our total cost on that job in Tennessee has peaked 160. Like $163 million. It was 10,000 acres. Big project. Now, if I went to Oxy in 2002 and said, hey, Oxy, I want you to do $163 million of cleanup work now, they would have laughed me out of the room saying, one, I don't have it. Two, there ain't no possible way, Zeller, anybody can spend $160 million in one construction season. There's a lot of logistics issues here. I've told -- I've been told by many environmental professionals that it's virtually impossible to spend more than 10 million a year. You know, so a $4 million cleanup is not to be taken lightly. It's

clearly a good step. And my point is, virtually every project we've worked on is productive in these phases. So at this point, if you look at the phases here, the first phase was the removal. The SVE system in the dry zone. The next phase was getting waterlines to people to make sure they had clean water to drink while they worked on the other phases. The third phase was, oh, man, we've got some air issues over here. We've got to get a better remediation system on the east side. So now really, if you look at it, this is kind of phase four is this -- you know, electrical resistence heating. Is there a phase five? Yeah, sure is. Deep groundwater, surface water. Is there a phase six? I hope not. You know, this gentleman talked about the master strategy. You're kind of seeing it unfold. This is what -- this is the fifth phase. There is a sixth phase that we should be part of the master plan. The sixth and final phase. It's not unusual for us to do this in bite-sized pieces, because it really comes down to timing and what you can do per year, and what you can afford to do.

BY MR. YOUNG:

Let's go to the next question over there.

BY MR. ANASTASI:

My name is Frank Anastasi, A-n-a-s-t-a-s-i. And I'd like to just get a comment into the record here. As you guys weigh this decision about increasing the treatment area beyond the one acre approximately area that has been identified, and to this other area where extremely high levels of TCE just to the north. I'm going to go back before you're familiar with this, Craig. When you commented on plans for the NAPL study a few years back before this -- before you came on, in 2012, serious comments were we need more sampling and deeper sampling in the area to the north. This area around well 6 and 7 which you're talking about now. And those samples -- those additional deeper samples and the additional area samples weren't taken for whatever reason. So conclusions were drawn based on the NAPL study that was performed. And also at that time I want to remind you all. Groundwater had risen about 10 feet from where they were before. From where it was before in

the source area. So if you think of this, (inaudible) water over a few years, 10 feet of rising water table, that pushed and pulled and put LNAPL and also possibly DNAPL or the TCE in all kinds of different places, too. And just imagine what might have happened. Then recently when the FFS was done, when the site was studied. Water levels had dropped -- dropped back 10 feet. So now we've got -- you've got a fluctuating unsaturated zone. So there's, I think, a lot of uncertainty about what's in the unsaturated zone as well as the saturated zone in that northern area, because you're talking about data measurements and NAPL thickness measurements at different points in time when the groundwater was 10 feet plus or minus where it is. And with those levels that high up in there, did you all think about, you know, how critical is it to address this area now. I think you need to add the thought that not only do we know what we know, but there's a lot of uncertainty, and it could be more sensitive than you think. I don't see how it could be less of a problem than the data we have. And I think to point

out the importance of this in the overall scheme of things, to hit it now -- you know, the farthest away offsite deepest well, which is 190 feet deep, what was the most recent sample of deep ground water TCE there? 35,000 parts per billion, right? And that was a long time ago and it hasn't been sampled since, and it's due to be sampled soon. So those things, I think, just add to the concern that it's really important we do whatever we can for the area that we know is as bad as it is. Just a suggestion.

BY MR. ZELLER:

Thank you. Good comment.

BY MR. YOUNG:

Let's take the next question.

BY MS. BACHER:

My name is Karen Bacher, B-a-c-h-e-r. I don't have difficult questions. I have several things I want to mention. There's a creek that goes by on Mills Gap Road. I'm assuming you've tested that it's not contaminated. And where is all the other water going -- the drainage going. The construction that you mentioned might be done the fourth quarter of

next year, that's already into the wintertime. So realistically you're going to be waiting until spring probably to do most of the construction. Why isn't there more signage out in front. Why isn't there more people here. I'm guessing most of the people have given up trying to come to these meetings. You are not the only person who probably feels like there's been grandstanding. This has been going on for so many years. It is not grandstanding if your mother -- any of you who think it's grandstanding. If your mother or family lives in that area, you would not be thinking that we're exaggerating the scare that they're going through, that they're living with, or their children are living with. My three minutes is already up. Almost up. My main thing is we're talking about groundwater. We're talking about all the technical stuff. And I think what is not being talked about, and maybe it has in past meetings, because I'm just learning about this, is to reimburse the medical bills, reimburse the funeral bills, reimburse them by buying back their home because they can't sell

their homes if it's a decent realtor, or the next person who goes in and finds out that, there's nothing to -- I mean, the soil, yes, needs fixed. The people living in that are, it's an insult.

BY MR. ZELLER:

Thank you.

BY MS. McFARLAND:

I'm Susan McFarland, M-c-F-a-r-l-a-n-d. You just addressed the -- sort of the tradeoff between the cost of remediation and trying to work within a budget per year or per amount of time. Could you address the penalties and fines that are being imposed on CTS, and the amount of fines and how that can be offset by their spending more money on getting the remediation done more quickly and doing more robust planning.

BY MR. ZELLER:

Well, as of now CTS has not been fined by EPA on any of our past oversight bills. All that stuff is getting worked out. Since the 2012 administrative order and consent, we are billing CTS on a fairly regular basis for my time, for Angela's time, for the folks who

work on the project. And those -- we are working on resolving and getting those bills paid. Now, there are -- there is a big chunk of money that I can't really -- I'm not at liberty to talk about. There are past costs that really predate 2012. All our costs associated with the NAPL listing and all the SVE costs in '06, '07, '08, '09 and '10. All the -- what we were doing out here in the '90s. All those costs have been documented. And I know what those generally involve. And so, yeah, we haven't recovered those costs yet, and haven't even asked them yet. We're kind of kicking that can down the road, trying to put available resources into the cleanup. We're recognizing that CTS has a budget that they kind of work in. They have to take orders. Right now our priority is not recovery of those past costs. We would rather that money, with the available resources are, go in and heating up the ground surface. Now, at some point are we going to have to cross that bridge? Yes. But as far as fines under consent order or anything like that, CTS has not been fined.

BY MS. McFARLAND:

I thought that was brought up in a past meeting that they were being fined?

BY MR. ZELLER:

There was some issues with escrow accounts and stuff, procedures that weren't probably followed in the AOC and we decided not to pursue those. Again, under the guise of do we really want to do this or should we, you know -- in the interest again -- I think that the letter said in the interest of moving forward we're going to waive some of these fines that we had right to gather and right to collect. But again, keeping the eye on the prize which is cleanup, cleanup, cleanup. Franklin Hill, my division director, decided to let's not poke people in the eye at this point in time. Let's keep that money moving towards the cleanup, which is what we decided to do. So there is no fines.

BY MR. YOUNG:

Okay, folks. It's about 8:20, so we've got to start thinking about wrapping up. I want to take a few more questions, if there are any, and then we'll have to call it a night.

BY MS. WASINESKI:

Hi. My name is Sally Wasineski, that's W-a-s-i-n-e-s-k-i. I have a few technical questions. And you answered these, I think, earlier, but I just wanted to have some clarification about. So earlier in your presentation you talked about electrical resistence heating method, the material between the groundwater in the bedrock to 80 to 90 degrees Celsius. That's below the boiling point of water. You referred to it as burning off VOCs. I know combustion is (inaudible). But just to clarify, I'm an educator, so -- but how will the 95 percent -- the 95 percent removal of the TCE contaminant is based off of previous sites, correct? Previous estimates. Or will this be run until 95 percent is volatilized?

BY MR. ZELLER:

Correct. This will be run until we get 95 percent reduction in the TCE concentration, as measured by the pretreatment and post treatment.

BY MS. WASINESKI:

So there is a -- there is a site which I

believe is inside the orange dashed line that was measured at 1.2 million parts per billion.

BY MR. ZELLER:

Yeah.

BY MS. WASINESKI:

So 95 percent removable still leaves 60,000 parts per billion left.

BY MR. ZELLER:

You're right. Yeah, you're starting -- the devil is always in the details. And so, there has to be a sampling program that, you know, it's going -- it's not going to use existing data. We're going to go out there and collect new data before we start heating this up. And will be agreed up what -- you know, we have to determine -- we have to set the bar. I used the example before. Let's call it 100. So I have to make sure, are we going to use a max. Is it going to be an average. Is it going to be a per well.

BY MS. WASINESKI:

That's right. So these details are important ---

BY MR. ZELLER:

They are.

BY MS. WASINESKI:

--- in order for ---

BY MR. ZELLER:

They are. Those details ---

BY MS. WASINESKI:

--- the community to be able to ---

BY MR. ZELLER:

I understand. And those details have not been worked out yet. All right? So that's going to be part of the detail design package. And so, what we're -- we're talking about -- we have to put these -- what it is -- I mean, I use this all the time. This is not nuclear physics. It's not rocket science. But it is environmental science. So there is a fair amount of details that go into this. And oftentimes we don't have the luxury to get into a seven page fact sheet. And quite frankly, that's not the objective nor the mission of that proposed plan. The mission of the proposed plan is to give you folks enough information so you can -- you will probably read a six page document. You're not going to read a 600 page feasibility study, because you're an educator or you're -- you know, you

got things to do, you know. That's not your job. It's my job. So my job really is to boil it down into things that you all can understand and then care about, you know. So yeah. I mean, there is -- that was one of the first comments that we had on the focus feasibility study is that this 95 percent thing sounds like a pretty good goal. Can't complain about that. How are we going to measure it. And that's -- I responded to that question before. But how we're going to measure that is by taking pretreatment per saturated soil, the stuff that's below the groundwater table, groundwater and NAPL. So that 1.1 billion number, that's probably NAPL. So it's going to have to be 95 percent for all three. So, in other words, if you get 95 percent of the groundwater and 95 percent of the soil, but you haven't got 95 percent of NAPL, then you're not done.

BY MS. WASINESKI:

What about the TCE value?

BY MR. ZELLER:

Excuse me?

BY MS. WASINESKI:

I think that was the TCE value.

BY MR. ZELLER:

TCE value. Well, at that level, that's NAPL. I mean, you're talking pretty much per product at that point.

BY MS. WASINESKI:

So my other question is -- because there has been some lack of clarity about how to address the contamination at well 6 and well 7. And so, some of -- we don't know what we would do, but with more -- I mean, do you know what you would do at well 6 and well 7? Would that be the same?

BY MR. ZELLER:

That could. I'd load the area with electrodes and cook it.

BY MS. WASINESKI:

Because it seems like it's unreasonable in terms of thinking about the path of least resistence to have an area that's not being evaluated for the best process. And if it seems like electrical resistence heating is the best process there, then the path of least resistence appears to be to do the whole two acres rather than the limited area. I am

definitely supporting your recommendation to expand the site to include the contamination at well 6 and well 7.

BY MR. ZELLER:

Thank you.

BY MR. YOUNG:

Thank you very much. Let's take a question from here.

BY MS. IVAN:

Linda Ivan. A few questions. I'm kind of concerned about that 6, 6A, because it is right at the head of Pinners Cove and there's no -- I mean, Pinners Cove is where there's been some issues. Am I correct?

BY UNKNOWN SPEAKER:

You are.

BY MS. IVAN:

So groundwater -- some of the path this way when Pinners Cove is that way has me confused. And it's right at the head -- that well is right at the head of Pinners Cove. So I'm just pointing that out.

BY MR. ZELLER:

See these wells here? Those are 9 and 10 across Mills Gap.

BY UNKNOWN SPEAKER:

She's talking about the Oaks and Chapel Hill Church Road and ---

BY MR. ZELLER:

Well, those wells -- that's a good point to take. Those wells go deep. So now, the Oaks, those wells are several hundred feet deep. These wells here that are part of this map, these are all -- there's two wells. There's the A, is the one that's set at the top of rock. And, of course, that surface varies. And the -- let's say the 5. Five is always the one that's sitting at the water table. It's shallow. But the point is, both of those wells are streamed above top of rock. So the area -- you've seen the maps. The area that shows a potential to groundwater plume heading this way north. That's all deep. Those wells are all several hundred feet deep in fractured bedrock well into rock. So as we mentioned, this remedy does not get in deep groundwater. Do I know that it has a deep groundwater issue that I have to follow-up at some point? Yes. Am I going to forget about that deep groundwater problem? No.

BY MS. IVAN:

I just got confused by that point.

BY MR. ZELLER:

Yeah. No. But yeah, we are fortunate in the fact that -- I know you folks don't want me to sit up here and say this plume is solved, and that this plume is easy. I know that that would be disrespectful. I've just been there three years. But I am here telling you that we have plumes in region four Fort Gillem comes in mind in Atlanta, Redstone Arsenal comes to mind in Alabama. That this plume is hundreds if not thousands of acres. That is a huge costly problem. Is this a costly problem? Yes. Is this a problem that we have tools to fix. Yes. We are -- that's why we're kind of optimistic and pretty damned exited, excuse me, about our options or our chances of success here, because with this electrical resistence heating, in the 25 years I've been doing this it's the closest thing I've had to the silver bullet at our disposal. We've never been able to do it because it's been too expensive. But as the technology has improved, as there's vendors that come there

-- it's like of like when the VCR first came up nobody could afford it. Now you can't even buy a VCR that cost 20 bucks, you know. You might at garage sales for $5.

BY MS. IVAN:

I appreciate your experience. But one thing that has me concerned is that it's -- we're looking at it in a moment in time, and this is not a static issue. This is -- this is an issue that's just changing. So that has me a little concerned about setting up a plan today that how will things -- is it going -- is there going to be any flexibility in your plan. Is there going to be regular monitoring to say to say oh, no. The thing -- because this is a little different situation in the way the ground is fractured. The heating, how is that going to effect this. Have you had any experience this type of -- an area like this with heating it like that. Could that, in itself, cause any issues and is that going to be monitored?

BY MR. ZELLER:

Well, TCE -- I've said this before. When we figure out a way to send Rovers to Mars, and

figure out a way to send Voyagers to, you know, past Pluto and that stuff, we can do some amazing things with engineering and science and technology. One thing that we had not figured out how to do really well yet is how to get -- how to address a TCE, PCB and PCE fractured bedrock. It's a difficult problem. But the one thing you cannot even begin to solve that problem until you turn off the sink. Because right now, and for a period of time, we have a sink up there in this general area, whether it be the one acre or the two area. Take your pick. That sink is contributing to the deep groundwater problem. We know it. We know that that sink continues to go drip, drip, drip, drip, and that's why we have an eastern remediation system. So for this job to be successful it has to be -- we have to turn off the sink. We have to crank down the -- we have to take that drip, drip, drip and cut if off. And then when we do that then we can start talking about deep groundwater. Now we do have some options for deep groundwater. Are we going to heat up 100 and 200 feet of rock. Probably not. This

remedy that, you know, TRS has been talking about, they've done 15 jobs worldwide that actually have remediated in hard rock. With money you can solve a lot of problems. But in all likelihood what are we going to do with that deep groundwater. People want to look in the crystal wall. You're probably looking at some target treatment, if needed. You might try to speed up bioremediation. Try to pump some stuff down there to get some bugs to start eating that stuff. Bioremediation of low level TCE plumes actually works quite well. It just doesn't -- you can't remediate 60 PPM with bioremediation because the bugs won't eat it. It's too concentrated. But can bugs eat several hundred PPB, which is what we got in deep groundwater, yeah. But Frank brought up a good point. I mean, I've got something going on because 11B down here is downgrading of the eastern remediation area. And the last time it was sampled at 100 -- about 190 feet down it had 30,000 PPB in it. That's a lot. Is that a problem? Yeah, it's a problem. Am I going to forget about that problem. No. Am I -- am I out right now

today to solve that problem? No, I'm not. Because until I get the problem I've got -- I've got to secure my borders basically. I've got to get my problem taken care of inside the fence line on top of rock. And when I get my problem inside this fence line secured on top of rock, I've got a really good chance to finish this job. But I don't until I do that. And that's what we're talking about today is try to ---

BY MS. IVAN:

Is there going to be more monitoring besides this? I mean, there will be continuing monitoring of the areas around ---

BY MR. ZELLER:

Oh, yeah. I had another question about that offline is that, yeah -- well, you know, we have multiple balls in the air. Clearly in that CTS, EPA, state of North Carolina, is this ERH remedy our focus? Yes. Do we have the luxury of that's the only ball we have in the area now? No. You know, we are continuing to do multitask. And as this work goes on, yes, we're going to put a priority on that. But the statewide investigation, you

know, fully characterizes extremes, fully characterizes what's going on in the deep groundwater. That's ---

BY MS. IVAN:

Yeah, we've heard that ---

BY MR. ZELLER:

Yeah. Well, that's a good question. But yeah, towards the end of this year we're going to have a chance to, you know, take a little breath. Got to recircle the wagon and say, okay, what's next on the horizon. Deep groundwater is what's next on the horizon.

BY MR. YOUNG:

We need to move on. I can take maybe one more question or maybe two short ones if we have them.

BY MS. SMITH:

My name is Lee Ann Smith. Lee Ann is two words, L-e-e, A-n-n, Smith. I would just like to say that I agree with your recommendation that the remedy be expanded beyond the orange area and go to those monitoring well 6 and 7. To get that area. Obviously the groundwater is moving to the east of the site. And it just seems like it's going to make a lot of

sense while the equipment is already there and onsite to do. It just seems like it would be a lot more -- I mean, it just means sense in many ways, but also financially to do it while it's already there instead of taking it down and then coming back years later to address it. So I support that decision.

BY MR. ZELLER:

Thank you.

BY MR. YOUNG:

Okay. So it's about that time we need to wrap up a little bit. But I'm going to put Craig on the spot here to wrap it up. Craig, what can you tell this community. When are we going to get back with them again? When can they expect that?

BY MR. ZELLER:

Well, we are roughly halfway through the comment period. Today is October 13th. The comment period ends the 30th. To-date we have not had a request for extension. If that request is -- somebody puts that up we will clearly think about that. We'll grant that if somebody wants it. If somebody does request it you'll see an email from Angela. Does

everybody in this room -- does everybody get Angela's email updates? If you're not getting Angela's emails, please see her afterwards so she has your address. If we do extend it you will know it the next day. But, Nester, to answer your question, if we don't extend the comment period it's very likely we'll be able to get through these comments and start the decision form. Now, whether I can get that done, you know, I mean, how many weeks are left in the year? About eight? There's only three in December. So I don't know if I'll have a record decision for you folks yet in December. It just kind of depends. But the next thing you will hear from me is there will be a release of the final record decision that will have a response and summary. I would look for that in the coming months. Probably late December, if not, January, February next year. After that, as I mentioned about the schedules, we talked about we have legal things to do, we've got some design to do, we've got procurement to do.

BY MR. YOUNG:

That's a lot of work for you to do. But I

think the community needs to understand is when is it that we're going to communicate back to you and let you know what's going on. When is the next news letter?

BY MS. MILLER:

We'll probably do one when the -- I'll do a community update and I'll put a notice in the local paper ---

BY MR. YOUNG:

So what I'm hearing ---

BY MS. MILLER:

--- the next day.

BY MR. YOUNG:

--- is possibly by December. So between now and December you're probably not going to be hearing much from us because we are back here trying to decide what we want to do and what strategy to take. But I think somewhere around the December, early January time-frame you'll probably see either a news letter or at least an email from Angela letting everybody know where we're at, what we're doing and what to expect next.

BY MR. McQUEEN:

Is there going to be an updated table on the

expenditures to-date that, Craig, you were talking about, but my mind has been spent. I'm pretty well versed, but I know that it was a little over $327,000 through 2007 total, and it was quadrupling in almost all of it, except for a fraction system with the sampling. And as we talk about money when people are leaving, I just hope that you all calculate the cost of peoples lives and the value of the suffering people have had to endure. And, Franklin, telling the truth isn't grandstanding. Embellishing our relationship to it would be. Telling the truth about what happened to those records and how they got removed and the fact that there's been criminal investigations that you're well aware of, that might be a bit grandstanding. The facts are the facts. The documents in that administrative record are still missing and still not available for the public. You took a 62,922 page (inaudible) to figure this stuff out. So I just want to set the record straight. That's not grandstanding. That's speaking the truth.

BY MR. YOUNG:

So I just want to end on a positive note.

BY MR. McQUEEN:

(Inaudible - applause) to-date on the table, that would be awesome.

BY MR. YOUNG:

We'll see what we can do for you. But -- so I just want to end on a positive note. Thank you for coming. I appreciate your time today. I hope that you have a better understanding of what we're doing out here. And again, if you did not get a chance to make a comment here publically, we still are accepting comments. We have a 30 day comment period. If you'd like to take one of those forms and write down those comments before you leave, we'll be glad to take those comments tonight. And I think we're done. Is that right, Angela? Do you have anything else?

BY MS. MILLER:

Yes. One other thing. A big thank you to my supervisor, Rachel McCullough, for operating the presentation tonight. Thanks, Rachel.

BY MR. YOUNG:

Thank you, folks. Have a good night.

(PROCEEDINGS CONCLUDED AT APPROXIMATELY 8:41 P.M.)

CERTIFICATE

I, Barbie M. Lane, CVR-M, CCR, Court Reporter and Notary Public, do hereby certify that the foregoing is an accurate transcript of the public forum, taken by me and transcribed under my supervision.

I further certify that I am not financially interested in the outcome of this action, a relative, employee, attorney or counsel of any of the parties, nor am I a relative or employee of such attorney or counsel.

This is the 16th day of November, 2015.

BARBIE M. LANE, CVR-M, CCR

Notary Public No.: 19953050008

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APPENDIX C

REDACTED

Comments on the Interim Proposed Plan for the CTS of Asheville, Inc. Superfund Site

Your input on the Interim Proposed Plan for the CTS of Asheville, Inc. Superfund Site is important to EPA. Comments provided by the public are valuable in helping EPA select a final cleanup remedy.

You may use the space below for written comments and place in the business reply envelope provided (no stamp necessary). You may also submit comments via email to Craig Zeller at zeller.craig@epa.gov. **All comments must be postmarked/submitted by October 30th.**

To whom it may concern,

Though I understand the estimated time and cost projection for this project, I would implore you to push further and cover all acreage that has been affected by the CTS contamination. It is, to my understanding, that only partial areas will be treated and I would like to see a secondary proposal that covers more area.

Thank you for your time,

Sincerely,

(b) (6)

Name (b) (6)

Addre

City Asheville,

State NC

Zip 28804

Comments on the Interim Proposed Plan for the CTS of Asheville, Inc. Superfund Site

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SAW the Citizens Time yesterday - I like the idea of Treble damages. Can you please use that to get it all cleaned up. The property to the west has also been contaminated and it is extremely not fair to not fix that problem when it is a valuable piece of Commercial property which cannot be sold at the height of the market.

Name (b) (6)

Addr

City Asheville

State N. C.

Zip 28803

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I own the property to the west of the site and do not understand why there is never any talk of cleaning up the property to the west. I have A property zoned Commercial which would permit Apartments or Condominiums but I can't sell the property because of the Contamination I loved hearing that you could hit CTS with Triple damages so please, use this to get my property cleaned up.

Name (b) (6)

Address

City Asheville,

State N.C.

Zip 28804

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I encourage the EPA to expand their proposed clean-up area & push CTS to assume their responsibility in mitigating the pollution.

The citizens of S. Asheville continue (& under the proposed clean-ups, will continue) to pay the price of the negligent pollution & clean-up efforts with their water quality & health & with depressed property values.

~~[illegible]~~

This site is becoming increasingly urban as Asheville grows around it & the problem of this land, the public outcry & the pressure on CTS & the EPA to manage a complete clean-up will only grow.

CTS has the opportunity now to step-up & go beyond the EPA recommendation & leave this area with good public sentiment. I hope they will do so. At the very least, the proposed 1-acre clean-up should be expanded to 2.

Name (b) (6)

Address

City Biltmore Forest

State NC

Zip 28803

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COMMENTS + QUESTIONS ABOUT THE OCTOBER MEETING @ T.C. ROBERSON ABOUT CTS –

I LIVE LESS THAN ½ MILE FROM CTS AND AM ON WELL WATER THE EPA STOPED CHECKING MY WATER QUALITY 3 YEARS AGO. WHY??

THEY WERE GOING TO INSTALL WATER (MUNICIPAL) LINES TO MY HOME AND MY NEIGHBORS. THEY DID NOT AND IT SEEMS THAT THAT PROJECT HAS STOPPED. WHEN WILL THEY INSTALL THEM

THE PROJECT TO BOIL OUT THE TCE ON ONE ACRE IS GOING TO COST APPROX 4 MILLION DOLLARS ON TOP OF THE 12 MILLION THE EPA HAS ALREADY SPENT. WHY NOT DO IT RIGHT – DIG IT UP. 10 YEARS AGO THE COST OF DIGGING UP THE WHOLE 9 ACRES WAS + OR – 5 MILLION. – WE HAVE THE FILL DIRT ALL LINED UP. → THE EPA DID NOT HAVE THE BUILDING REMOVED!

THE EPA DID NOT HAVE THE WATER LINES INSTALLED!

WHY NOT GIVE CREDIT WHERE IT IS DUE? REP TIM MOFFITT. THE 9 ACRES COULD BE DUG UP, REMOVED, AND FILLED IN IN 6 MONTHS TO 1 YR TOPS. THEN IT IS DONE. OR IS DRAGGING THIS OUT JOB SECURITY FOR THE EPA PERSONAL??

N (b) (6)

A

City ASHEVILLE, NC

State NC

Zip 28803

Comments on the Interim Proposed Plan for the CTS of Asheville, Inc. Superfund Site

Your input on the Interim Proposed Plan for the CTS of Asheville, Inc. Superfund Site is important to EPA. Comments provided by the public are valuable in helping EPA select a final cleanup remedy.

You may use the space below for written comments and place in the business reply envelope provided (no stamp necessary). You may also submit comments via email to Craig Zeller at zeller.craig@epa.gov. **All comments must be postmarked/submitted by October 30th.**

I approve of the current EPA-approved proposal to remediate the so-called "1-acre site" at CTS even though after hearing the EPA presentation on October 13th at Roberson School I am convinced that no meaningful resolution of this matter can be accomplished for the owners of property to the west and East of CTS site until the contamination evidenced by wells to the North & Northwest of the "1-acre site" is remediated in the same manner as the current $4.2M proposal favored by EPA + CTS itself for the 1-acre site.

The EPA should use all its power to insure that this site (including the lands to which the contaminants have migrated) is fully remediated.

Name [redacted]

Address [redacted]

City Asheville NC 28804

State

Zip

I support the expanded cleanup of Wells 6 + 7,

(b) (6)

Zeller, Craig

From: John Olsen <creeind@yahoo.com>
Sent: Wednesday, September 30, 2015 2:14 PM
To: Zeller, Craig
Subject: I am suggesting a New method for waste containment
Attachments: CreeCrete Interlocking Blocks.pdf

My solution is to ENCAPSULATE the waste in a BLOCK.

see attached
regards
JohnO

John O. Olsen
President.
Cree Industries Inc.
tel 904 783 2165
creeind@yahoo.com

www.creeindustries.com

To proposed plan is available for review at the CTS Site information repository at the Pack Memorial Library, 67 Haywood Street in Asheville. The document is also available online at:
http://semspub.epa.gov/src/collection/04/AR63944

Written comments may be e-mailed to zeller.craig@epa.gov or mailed to: Craig Zeller, U.S. EPA Region 4, Superfund Division – 11th Floor, 61 Forsyth Street SW, Atlanta, GA.

creeind@yahoo.com

CREECRETE
INTERLOCKING BLOCKS

Cree Industries Inc.

Zeller, Craig

From: (b) (6)
Sent: Friday, October 09, 2015 6:08 PM
To: Zeller, Craig
Subject: Remedial Action Plan for the CTS Superfund site

Hi,

How will EPA ensure that the method is successful?
What before and after measurements will you require?
What will be done if the method does not work as intended?
What will be done to make sure that the vaporized TCE does not escape and contaminate air in our community?
Where will be toxins extracted and separated out by this cleanup process be taken for disposal?
Does the community have the opportunity to comment on the disposal location?
Will EPA and CTS be able to keep investigating and characterizing the deeper areas of TCE ("DNAPL") while this interim action is going on?
When will work begin on the site-wide remedy?

The EPA must expand the treatment area to include an additional highly contaminated area to the northof the proposed area. Left untreated, this additional mass of TCE remains a potent source of contamination that will continue to migrate, uncontrolled, onto private properties to the east and west of the CTS site.

Samples in this northern contaminated area show massive, highly hazardous amounts of TCE. The maximum contaminant level for TCE is 5 parts per billion, yet samples have found 830,000 parts per billion TCE in soil/weathered bedrock in 2004; and 62,100 parts per billion TCE in groundwater as recently as 2015!

The EPA has already recognized that the northern area should and could be cleaned up NOW, not kicked down the road - I expect you make it happen using your existing authority.

I Agree with EPA that electrical resistance heating (ERH) is a good technology to use for this remedial action plan.

Sincerely,

(b) (6)
Hendersonville, NC
USA 28793
(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Saturday, October 10, 2015 11:05 AM
To: Zeller, Craig
Subject: Clean up the toxic CTS site!

Clean up the toxic CTS site!
Public meeting: Tuesday, October 13, 6:00 PM T.C. Roberson High School Auditorium, 250 Overlook Road
Or submit written comments by October 30 to: Craig Zeller, zeller.craig@epa.gov / US EPA Region 4, Superfund Division - 11th Floor, 61 Forsyth Street, SW, Atlanta, GA 30303 In your comments, be sure to ask EPA to force CTS to clean up an additional acre of contamination!

¬ EPA must expand the treatment area to include an additional highly contaminated area to the north of the proposed area. Left untreated, this additional mass of TCE remains a potent source of contamination that will continue to migrate, uncontrolled, onto private properties to the east and west of the CTS site.

¬ Samples in this northern contaminated area show massive, highly hazardous amounts of TCE. The maximum contaminant level for TCE is 5 parts per billion, yet samples have found 830,000 parts per billion TCE in soil/ weathered bedrock in 2004; and 62,100 parts per billion TCE in groundwater as recently as 2015!

¬ EPA has already recognized that the northern area should and could be cleaned up NOW, not kicked down the road - now let them know we expect them to make it happen, using their existing authority.

¬ Agree with EPA that electrical resistance heating (ERH) is a good technology to use for this remedial action plan.

Questions you can ask EPA:

¬ How will EPA ensure that the method is successful? What before and after measurements will you require? What will be done if the method does not work as intended?

¬ What will be done to make sure that the vaporized TCE does not escape and contaminate air in our community?

¬ Where will be toxins extracted and separated out by this cleanup process be taken for disposal? Does the community have the opportunity to comment on the disposal location?

¬

(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Sunday, October 11, 2015 5:53 AM
To: Zeller, Craig
Subject: CTS remediation actions

Dear Mr. Craig Zeller,

We believe that your proposed cleanup of the CTS site would be most beneficial to all concerned if both areas on the site were cleaned up at the same time. We support your aggressive and effective remedy of BOTH areas on the CTS site at the same time.

(b) (6)

Sent from my iPad

Zeller, Craig

From: (b) (6)
Sent: Sunday, October 11, 2015 9:58 AM
To: Zeller, Craig
Subject: CTS Clean up

Mr. Zeller - below are comments and questions about the clean-up process for the CTS site:
EPA must expand the treatment area to include an additional highly contaminated area to the north of the proposed area. Left untreated, this additional mass of TCE remains a potent source of contamination that will continue to migrate, uncontrolled, onto private properties to the east and west of the CTS site.
Samples in this northern contaminated area show massive, highly hazardous amounts of TCE. The maximum contaminant level for TCE is 5 parts per billion, yet samples have found 830,000 parts per billion TCE in soil/ weathered bedrock in 2004; and 62,100 parts per billion TCE in groundwater as recently as 2015!

EPA has already recognized that the northern area should and could be cleaned up NOW, not kicked down the road. So please do that.

I have the following questions for the EPA:

How will EPA ensure that the method is successful? What before and after measurements will you require? What will be done if the method does not work as intended?
What will be done to make sure that the vaporized TCE does not escape and contaminate air in our community?
Where will be toxins extracted and separated out by this cleanup process be taken for disposal? Does the community have the opportunity to comment on the disposal location?
Will EPA and CTS be able to keep investigating and characterizing the deeper areas of TCE ("DNAPL") while this interim action is going on? When will work begin on the site-wide remedy?

Thank you for your attention. Sincerely,(b) (6)

(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Sunday, October 11, 2015 12:54 PM
To: Zeller, Craig
Subject: CTS Site Cleanup

Dear Mr. Zeller,

I believe that your proposed cleanup of the CTS site, would be most beneficial to all concerned, if both areas on the site were cleaned up at the same time.

I support your aggressive and effective remedy for remediation of BOTH areas on the CTS site. It seems obvious that your recommendation would be both the most complete and cost-effective method.

Thank you for all your efforts on our behalf.

Yours truly,

(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Sunday, October 11, 2015 9:03 PM
To: Zeller, Craig
Subject: CTS

Dear Mr Zeller:
As a resident of Southside Village, I would like to request that the cleanup of both CTS sites be done at one time. It's time to finish the job.
(b) (6)

Sent from my iPhone

Zeller, Craig

From: (b) (6)
Sent: Sunday, October 11, 2015 9:19 PM
To: (b) (6) joe.belcher@buncombecounty.org; miranda.debruhl@buncombecounty.org
Cc: Zeller, Craig; Ronald Karpola; Craig Mariani
Subject: CTS cleanup

We recently attended a meeting on September 23, 2015 at the Skyland fire house where the EPA described the most recent evaluation of the CTS toxic site on Mills Gap Road in southern Buncombe county. Craig Zeller, the EPA representative described the history of the site and the proposed next level of cleanup. He described the proposed one acre cleanup that CTS has agreed to and the need to do further work on the site beyond this one acre cleanup under the plant. While the one acre cleanup will remove a large amount of TCE from the ground, he pointed out that it was very unlikely that this level of cleanup will allow the site to reach a level of TCE that would meet the EPA guidelines to remove the site as a Superfund site. He suggested that widening the area of cleanup would be more cost effective and ensure that the the site could be returned to meaningful use. If not added to the work plan now, he suggested that it would need to be done at a future date with significantly more cost.

We would like to ask for your support to help CTS and the EPA come to a decision to expand the scope of cleanup to permit the earlier removal of all the toxic waste at the Mills Gap Road site. Please contact the EPA and CTS to help us. We are next door neighbors to this site and would very much like to see that land become a useful part of Buncombe County.

--

(b) (6)
(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Monday, October 12, 2015 9:31 AM
To: Zeller, Craig; Sandy
Subject: EPA Letter
Attachments: removed.txt

Dear Mr. Craig Zeller,

I believe that your proposed cleanup of the CTS site would be most beneficial to all concerned if both areas on the site were cleaned up at the same time. I support your aggressive and effective remedy of BOTH areas on the CTS site at the same time.

Thank you,

(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Monday, October 12, 2015 10:18 AM
To: Zeller, Craig
Subject: CTS Site Remediation

Dear Mr. Craig Zeller,

I believe that your proposed cleanup of the CTS site would be most beneficial to all concerned if both areas on the site were cleaned up at the same time. I support your aggressive and effective remedy of BOTH areas on the CTS site at the same time. It would be far more cost-effective to clean both areas now as it would prevent un-cleaned contaminants from spreading to other areas.

(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Monday, October 12, 2015 5:57 PM
To: (b) (6)

Subject:

We recently attended a meeting on September 23, 2015 at the Skyland fire house where the EPA described the most recent evaluation of the CTS toxic site on Mills Gap Road in southern Buncombe county. Craig Zeller, the EPA representative described the history of the site and the proposed next level of cleanup. He described the proposed one acre cleanup that CTS has agreed to and the need to do further work on the site beyond this one acre cleanup under the plant. While the one acre cleanup will remove a large amount of TCE from the ground, he pointed out that it was very unlikely that this level of cleanup will allow the site to reach a level of TCE that would meet the EPA guidelines to remove the site as a Superfund site. He suggested that widening the area of cleanup would be more cost effective and ensure that the the site could be returned to meaningful use. If not added to the work plan now, he suggested that it would need to be done at a future date with significantly more cost.

We would like to ask for your support to help CTS and the EPA come to a decision to expand the scope of cleanup to permit the earlier removal of all the toxic waste at the Mills Gap Road site. Please contact the EPA and CTS to help us. We are next door neighbors to this site and would very much like to see that land become a useful part of Buncombe County.

(6)

Zeller, Craig

From: Haire, Stacey
Sent: Thursday, October 15, 2015 11:25 AM
To: Zeller, Craig
Subject: CTS--another official comment

Craig,

Here's another comment for the record.

--Stacey

Stacey A. Haire
Senior Attorney
Office of Regional Counsel
U.S. EPA Region 4
61 Forsyth Street, SW
Atlanta, GA 30303
(404) 562-9676

From: (b) (6)
Sent: Sunday, October 11, 2015 4:49 PM
To: Haire, Stacey <Haire.Stacey@epa.gov>
Subject: Re: CTS

Thank you for providing the information as to the hearing this coming Tuesday. I do not intend to come, however, I do have several comments. First, let me make it clear that I have no connection with CTS as I do not even know a single person with the company, nor do I own any CTS stock. I was requested back in 1990 to let corporate handle this matter and I was to stay out of it, which I have done until the WLOS TV aired an investigative report in 2014 and I was interviewed.

1. IRC (now part of TRW) purchased the degreasing unit which had a concrete retainer to catch any spills etc from the degreasing tank. It is now known that the concrete retainer was the wrong material to have used as it allows TCE to permeate through down to the soil below. The true culprit is the company that designed this system, though IRC should share some responsibility as they could have checked to make certain that the unit designer knew that the retainer would truly contain TCE.
IRC operated the degreaser from 1953 to 1959, so they should have to pay a portion of the cleanup both retroactively and currently.
The incidents of cows being killed due to IRC plating room spills merely tends to show that they did not operate as a truly responsible company.
CTS, during my tenure as General Manager from 1963 to 1986, was always concerned about our employees well being as well as the environment. We installed safety devices on our machinery to protect employees from injury and also installed noise reducing equipment to protect employee hearing. A surprise OSHA visit did not come up with any significant findings, though as I recall, they did find a few instances where some of the machinery guards were not adjusted properly, so no fines were ever made.

2. Page 2 of your October 2015 summary of this hearing said that from 1953 to 1959 disposal from the facility were unknown. This is not true. The individual whose name I gave to you was working in the plating and degreasing areas for IRC at the time and can attest that they operated and disposed of the waste materials though he would have to tell you whether the TCE was always sent to be recycled . IRC did send the plating room waste water into the sewer system as did CTS early on. Somewhere in the early 1960's CTS installed a waste treatment system which the Metropolitan Sewage System personnel applauded and used our system as an example to other plants in the area. As to the dirty TCE from the degreasing unit, we always sent it to a Lenoir facility to reclaim it. Later when the Lenoir facility went out of business, we purchased our own system for recycling the TCE The only time we stored hazardous waste from either the plating room or the degreaser in metal drums was to get it ready to ship to the hazardous waste facility in South Carolina. Our records were sent to Corporate after the plant was closed, so they may have the records to confirm this, though after this many years they may have disposed of the records.

3. Concerning the current proposal to clean up, was an extensive investigation made to ascertain that only one acre should be cleaned up, or will it be found later that a larger area should have been cleaned up? And to what depth is the contamination and will the immersion rods penetrate to the bottom of the contamination?

4. Final comment. Had EPA had a thorough investigation performed in 1990 to determine how far the contamination had spread and then had a thorough clean up done at that time, the clean up area would likely have been much smaller as over the years the contamination spread further and deeper, thus making the clean up more costly and the main thing is that the people in the contaminated area would have been spared the illness etc. In my opinion, due to EPA not following their own flow chart on how matters should be handled EPA should also be paying part of the clean up costs.

While the past cannot be undone, I would hope that IRC and EPA would both have to shoulder their responsibility and pay a portion of the costs and reimburse CTS for part of what they have already paid. It is a terrible shame that the people in the area have had to suffer the consequences and for far longer than should have been.

From: Haire, Stacey
Sent: Wednesday, October 07, 2015 1:12 PM
To: (b) (6)
Subject: RE: CTS

(b) (6)

I'll look forward to hearing from (b) (6) Thank you for passing along my contact information.

The public meeting is next Tuesday, October 13th at 6:00 p.m. in the auditorium of T.C. Roberson High School (250 Overlook Road, Asheville). The purpose of the meeting is to discuss the plan for the first step of the groundwater cleanup. The public is invited to comment. See the attached Proposed Plan for more detail.

--Stacey

Stacey A. Haire
Senior Attorney
Office of Regional Counsel
U.S. EPA Region 4
61 Forsyth Street, SW
Atlanta, GA 30303
(404) 562-9676

From: (b) (6)
Sent: Wednesday, October 07, 2015 11:36 AM
To: Haire, Stacey
Subject: CTS

I have given your name and phone number to (b) (6) who is the (b) (6) deceased Norman Lewis. (b) (6) was employed by IRC and worked in the plating room and also operated the degreasing tank from 1953 into 1954 when (b) (6) He returned to IRC and with CTS

He said he would contact you and was trying to find out the date of the spill that killed several cows.

Re the meeting next week, please give me the date, time and location as I may try to attend.

(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Thursday, October 15, 2015 11:36 AM
To: Zeller, Craig
Subject: CTS cleanup

Dear Mr. Craig Zeller,

I believe that your proposed cleanup of the CTS site would be most beneficial to all concerned if both areas on the site were cleaned up at the same time. I support your aggressive and effective remedy of BOTH areas on the CTS site at the same time.

--

Kind regards,

(b) (6)

1075 Hendersonville Rd. Suite 100
Asheville, NC 28803

Zeller, Craig

From: (b) (6)
Sent: Thursday, October 15, 2015 5:49 PM
To: Zeller, Craig
Subject: support CTS cleanup of two acres

I think CTS should be required to clean up all of their mess, and keep the TCE out of the neighbors' land. I don't believe in half measures. Thanks for all your time and effort in this matter.

Sincerely,

(b) (6)

--

(b) (6)

Asheville, NC 28804

Zeller, Craig

From: (b) (6)
Sent: Monday, October 19, 2015 9:15 AM
To: Zeller, Craig
Subject: Asheville CTS contaminated site

Dear Craig,

I support the two acre site cleanup rather than the one acre that CTS is willing to do at this time.

(b) (6)

Sent from my iPad

Zeller, Craig

From: (b) (6)
Sent: Monday, October 19, 2015 9:24 AM
To: Zeller, Craig
Subject: CTS Superfund Site at (b) (6)

Dear Mr. Zeller,

I am writing to ask that the EPA push for CTS Corporation to expand their cleanup from the proposed 1-acre parcel to 2 acres. It is time for the company to take responsibility for the mess made decades ago, allowing the people of this area to enjoy their civil right of living in a non-contaminated area.

One can see from their 2014 Annual Report that CTS is not struggling to survive as a corporation. Indeed, with $404 million in annual sales, $26.5 million in net earnings, a 3:1 assists:liabilities ratio, and $60 million in net cash, the company brags to its shareholders that it is in great financial shape.

Please ask them to use some of these resources to clean up the mess at Mills Gap Road, and then brag to shareholders in their 2015 Annual Report that they did the right thing for the fine people of a forgotten community in Western North Carolina.

Thank you for your consideration.

Sincerely,

(b) (6)
Asheville, NC

Zeller, Craig

From: (b) (6)
Sent: Wednesday, October 21, 2015 2:00 PM
To: Zeller, Craig
Cc: Miller, Angela
Subject: Comment on CTS Asheville Interim Remedial Action Plan

Good afternoon Craig,

On behalf of POWER Action Group, I write to let you know that POWER supports the EPA's decision to move ahead with an interim remedial action plan at the CTS of Asheville site that will address the residual NAPL/TCE source material in the saturated zone using the Electric Resistance Heating (ERH) method.

Additionally, POWER strongly recommends that the EPA expand the treatment area to include the adjacent highly contaminated source area beyond the proposed one-acre treatment area to the north, extending to the area of monitoring well clusters MW6 and MW7. Sampling data shows this additional area presents a potent source of TCE that will continue to migrate to the west and southeast and contaminate off-site ground water if left untreated.

Even though the proposed plan states that the MW6 and MW7 cluster will be addressed in the final site-wide cleanup decision, that decision is likely several years down the road. Actual implementation of a site-wide remedy could take five years or more. Therefore, in the interest of effectiveness, cost-efficiency, and responsible protection of human health and the environment, POWER supports EPA's preference for expansion of the treatment area to make the interim remedial action more effective as the ERH method is implemented.

Addressing the additional area that includes MW6 and MW7 during this interim remedial action phase would help ensure that re-contamination of the treated area is not as likely to occur prior to implementation of the long-term site-wide remedy.

POWER strongly calls on the EPA to use its existing Superfund authority to expand interim cleanup activities to include the aforementioned additional source area encompassing MW6 and MW7. POWER does not want this recommended expansion, however, to delay implementing the interim remedial cleanup action for the NAPL source area. We believe EPA should exercise its power and authority to prevent any such delay.

A hard copy of POWER's comments were mailed today. Thank you for your consideration of our requests, and for all your effort on this project.

All Best,

(b) (6)
POWER Action Group (TAG recipient)
http://poweractiongroup.org/
(b) (6)

(b) (6)
Chair, POWER Action Group
(b) (6)
Arden, NC 28704

October 21, 2015

Mr. Craig Zeller,
US EPA Remedial Project Manager
Region IV Superfund Division
61 Forsyth St. SW
Atlanta, GA 30303

Dear Mr. Zeller,

POWER Action Group supports the EPA's decision to move ahead with an interim remedial action plan at the CTS of Asheville Superfund site that will address the residual NAPL/TCE source material in the saturated zone using the Electric Resistance Heating (ERH) method.

Additionally, POWER strongly recommends that the EPA expand the treatment area to include the adjacent highly contaminated source area beyond the proposed one-acre treatment area to the north, extending to the area of monitoring well clusters MW6 and MW7. Sampling data shows this additional area presents a potent source of TCE that will continue to migrate to the west and southeast and contaminate off-site ground water if left untreated.

Even though the proposed plan states that the MW6 and MW7 cluster will be addressed in the final site-wide cleanup decision, that decision is likely several years down the road. Actual implementation of a site-wide remedy could take five years or more. Therefore, in the interest of effectiveness, cost-efficiency, and responsible protection of human health and the environment, POWER supports EPA's preference for expansion of the treatment area to make the interim remedial action more effective as the ERH method is implemented.

Addressing the additional area that includes MW6 and MW7 during this interim remedial action phase would help ensure that re-contamination of the treated area is not as likely to occur prior to implementation of the long-term site-wide remedy.

POWER strongly calls on the EPA to use its existing Superfund authority to expand interim cleanup activities to include the aforementioned additional source area encompassing MW6 and MW7. POWER does not want this recommended expansion, however, to delay implementing the interim remedial cleanup action for the NAPL source area. We believe EPA should exercise its power and authority to prevent any such delay.

Thank you for your consideration of our requests, and for all your effort on this project.

All Best,

(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Wednesday, October 21, 2015 10:00 PM
To: Zeller, Craig
Subject: CTS site in NC

Dear Mr. Zeller,

I am writing to ask that the EPA push for CTS Corporation to expand their cleanup from the proposed 1-acre parcel to 2 acres. It is time for the company to take responsibility for the mess made decades ago, allowing the people of this area to enjoy their civil right of living in a non-contaminated area.

One can see from their 2014 Annual Report that CTS is not struggling to survive as a corporation. Indeed, with $404 million in annual sales, $26.5 million in net earnings, a 3:1 assists:liabilities ratio, and $60 million in net cash, the company brags to its shareholders that it is in great financial shape.

Please ask them to use some of these resources to clean up the mess at Mills Gap Road, and then brag to shareholders in their 2015 Annual Report that they did the right thing for the fine people of a forgotten community in Western North Carolina.

Thank you for your consideration.

Sincerely,

(b) (6)
Asheville, NC

PATRICK T. McHENRY
CHIEF DEPUTY WHIP
MEMBER OF CONGRESS
10TH DISTRICT, NORTH CAROLINA

2334 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515
(202) 225-2576
FAX: (202) 225-0316
www.house.gov/mchenry

VICE CHAIRMAN,
COMMITTEE ON FINANCIAL SERVICES

Congress of the United States
House of Representatives
Washington, DC 20515–3310

DISTRICT OFFICES:

87 FOURTH STREET, NW
SUITE A
P.O. BOX 1830
HICKORY, NC 28603
(828) 327-6100
FAX: (828) 327-8311

GASTONIA DISTRICT OFFICE:
128 WEST MAIN AVENUE, SUITE 115
GASTONIA, NC 28052
(704) 833-0096
FAX: (704) 833-0887

BUNCOMBE REGIONAL OFFICE:
BLACK MOUNTAIN TOWN HALL
160 MIDLAND AVENUE
BLACK MOUNTAIN, NC 28711
(828) 669-0600

TOLL FREE IN NC
(800) 477-2576

October 21, 2015

Mr. Craig Zeller, Remedial Project Manager
USEPA Region IV, Superfund Division
11th Floor, 61 Forsyth Street, SW
Atlanta, GA 30303

Dear Mr. Zeller:

Thank you for providing a public meeting opportunity on October 13, 2015, for stakeholders to learn about the Proposed Plan for Interim Remedial Action for the CTS of Asheville. Inc. Superfund Site. I was encouraged by the consensus on using Electrical Resistance Heating (ERH) for the interim action and the favorable information you provided about the method's efficacy. I appreciate your ongoing efforts to move forward with an effective cleanup strategy while keeping the public informed and managing concerns from a number of perspectives.

There are two issues cited in the proposed plan that I believe merit additional attention:

1) As you cited during the October 13 meeting and in community updates, the proposed plan submitted by CTS does not include removal action for the area surrounding test wells MW6 and MW7; although high trichloroethene (TCE) concentrations have been recorded there. During the meeting, a CTS representative indicated an interest in addressing that area of contamination as soon as EPA allowed some further vetting of the area. The representative was not specific about what further vetting was needed or what obstacles exist to proceed with treatment for the MW6 and MW7 area as part of this interim action. Members of my staff who attended the meeting reported that you did not seem to indicate there are any practical reasons not to proceed with ERH treatment in that area.

   I would appreciate any clarification you can provide with regard to the objections to including the MW6 and MW7 area in the interim action. In addition, I believe any action you can take to assist, motivate, or compel CTS to include the area without delaying the agreed upon action in the central contamination area will be beneficial and appropriate.

-More-

2) I would also appreciate any additional information you can provide about the deep and fractured bedrock contamination that is not addressed by the interim action. I understand the tactical importance of dealing with the source material first through the remedial action and also understand the removal of the deeper contamination is more complex. My concern is the risk of that contamination migrating off site, thus increasing the public risks and making cleanup more difficult if action is deferred for a number of years. What methods can be employed to address that problem? Is it possible to control the migration of the contamination while the final site-wide cleanup is pending and/or can interim actions be taken to deal with the deeper contamination in conjunction with the source interim action?

Any insight you can offer regarding these concerns will be greatly appreciated, Please address your response to my Hickory District Office, P.O. Box 1830, Hickory, NC 28603. Again, thank you for your efforts on behalf of my constituents. I look forward to hearing from you

Sincerely,

Patrick McHenry
Member of Congress

PM/dm

Zeller, Craig

From: (b) (6)
Sent: Monday, October 26, 2015 1:56 PM
To: Zeller, Craig
Subject: Mills gap road clean up

Dear Mr Zeller,
I am a south side village property owner and full time resident.

I believe that your proposed cleanup of the CTS site would be most beneficial AND most efficient to all concerned if both areas on the site were cleaned up at the same time.
I support your aggressive and effective remedy of BOTH areas on the CTS site at the same time. Any delay could cause more damages to all living near by.
Sincerely,

(b) (6)
Asheville, NC
28803
(b) (6)
) (6)

Zeller, Craig

From: (b) (6)
Sent: Monday, October 26, 2015 5:59 PM
To: Zeller, Craig
Subject: CTS Cleanup in Asheville

Dear Mr. Zeller:

As concerned residents of SouthSide Village, we believe that your proposed cleanup of the CTS site would be most beneficial to all concerned if both areas on the site were cleaned up at the same time, and support your recommendation of aggressive and effective solution of cleaning up BOTH areas at once.

(b) (6)
Asheville NC 28803

I

Zeller, Craig

From: (b) (6)
Sent: Monday, October 26, 2015 6:17 PM
To: (b) (6)
Cc: Zeller, Craig
Subject: [SPAM] CTS factory clean-up in Asheville, NC
Attachments: At Superfund meeting, EPA offers a choice.webarchive

As a resident of Southside Village, which is located next-door to the CTS factory site in Asheville, I attended a meeting on September 23, 2015, at the Skyland fire station, where the EPA described the most recent evaluation of the toxic CTS site. Craig Zeller, the EPA representative, reviewed the history of the site and the proposed next level of clean-up. He described the proposed one-acre clean-up that the CTS Corporation has agreed to do under the concrete floor of the plant and the need to do further clean-up beyond this limited area. While the one-acre clean-up will remove a large amount of the toxic TCE from the ground, he pointed out that it was very unlikely that this will allow the site to reach a level of TCE that would meet the EPA guidelines to remove the site from the Superfund list. He recommended that widening the area of clean-up to include an additional one-acre area approximately 100 yards northeast of the concrete floor would be more cost effective in the long run and ensure that the site could be returned to meaningful use. Cleaning the additional area now would prevent any migration of contaminated water to adjacent residential areas, which tests have shown would likely ensue. If not added to the work plan now, it would need to be done at a future date with significantly more cost involved.

I would like to ask for your support to help CTS and the EPA come to a decision to expand the scope of the clean-up to include the additional one-acre area.

Attached is an October 2015 EPA newsletter summarizing the CTS clean-up.

Thank you for your consideration,

(b) (6)
Asheville NC 28803

Zeller, Craig

From: (b) (6)
Sent: Monday, October 26, 2015 10:14 PM
To: Zeller, Craig

Craig I hope by now that you have convinced CTS that our community does not want their plan to half clean up the contaminated site. This makes no sense to leave the other acre with the high level of TCE to continue to flow toward our property and into the others in our community.

You say CTS doesn't have the money and you do not want to "lawyer up", if they had said one half acre, would you have gone along with that also? It seems that you are always letting them tell you what to do. EPA stand for Protection of the people, not to let a Corporation tell you what to do. You have the authority and have had since when the contamination was known to protect the community. CTS could have done a clean up and not cost them so much if only EPA had done their job and forced them to do it years ago. Now you want us to accept a half job. I don't want that and I believe the entire community told you the same thing .EPA can get the money for a complete clean up and then worry a bout "Lawyer up"when it is cleaned up and sue them for the money then.

How much is human life worth to you and CTS? In five more years how many others will be sick or dead? Now is the time for a complete clean up.

Thanks (b) (6)

Zeller, Craig

From: (b) (6)
Sent: Tuesday, October 27, 2015 11:31 AM
To: Zeller, Craig
Subject: CTS site clean up

Dear Mr. Craig Zeller,

I believe that your proposed cleanup of the CTS site would be most beneficial to all concerned if both areas on the site were cleaned up at the same time. I support your aggressive and effective remedy of BOTH areas on the CTS site at the same time.

Best,

(b) (6)
Asheville, NC 28803

(b) (6)
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VIEW MY LISTINGS

Zeller, Craig

From: (b) (6)

Sent: Tuesday, October 27, 2015 3:38 PM
To: Zeller, Craig
Subject: EPA push for CTS to expand their cleanup

Dear Mr. Zeller,

I write to ask that the EPA push for CTS to expand their cleanup from the proposed 1-acre parcel to 2 acres. CTS must take responsibility for the mess made decades ago, allowing the people of this area to enjoy their civil right of living in a non-contaminated area. Their 2014 Annual Report shows that CTS is not struggling. With $404 million in annual sales, $26.5 million in net earnings, and $60 million in net cash, the company brags to its shareholders of being in great financial shape. Please ask them to use some of these resources to clean up the mess at Mills Gap Road, and then brag to shareholders in their 2015 Annual Report that they did the right thing for the fine people of a forgotten community in Western North Carolina.

Thank you for your consideration,

(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Tuesday, October 27, 2015 7:51 PM
To: Zeller, Craig
Subject: Comments regarding CTS of Asheville Interim Proposed Plan

October 27, 2015

Dear Mr. Zeller,

I attended the October 13th public information meeting regarding proposed cleanup options at the CTS of Asheville site. I appreciated your frankness, obvious competence, and concern for the community. I support your selection of electrical resistance heating (ERH) as the preferred treatment alternative, but I'm writing today to strongly urge you to expedite and insist on the larger 2-acre treatment area (that you've sought and CTS declined).

In my opinion, there is sufficient evidence that this "second acre" (to the north of the proposed 1-acre area) is part of the source. It was disingenuous when the CTS representative said at the meeting that they couldn't address this area yet because more testing was needed. We both know they have enough information to begin treatment of this area too. Besides, if more data were needed in this area, they could and should have collected it as part of the NAPL study, the focused feasibility study, or any of the other numerous studies that have been conducted over the past decade. Allowing CTS more time to "study" this second acre would be rewarding them for their lack of initiative or inept site assessment over the past many years.

On a related note, I urge EPA to use its authority to take this cleanup out of CTS's hands. I understand your general practice to work with a PRP on a voluntary cleanup, but this cleanup has been anything but voluntary. EPA has repeatedly given CTS the chance to step up to the plate, but they've spent their time and money trying everything to avoid moving forward. Over 10 years ago, CTS installed a vapor extraction system, which removed some VOCs but did not address the deeper source. Last year they installed a vapor system on the Rice property, which has resulted in cleaner air but did not address the source. **Now is the time to address the source.** You said during the October 13th meeting that pushing the 2-acre treatment site would likely "get the lawyers involved" and lead to a significant delay. I urge EPA to use its authority to conduct ERH on the 2-acre area on its own (as it would with a delinquent or nonexistent PRP). The lawyers can work out making CTS pay for this cleanup later.

Finally, you've suggested that you were hesitant to turn down CTS's proposed 1-acre treatment area because it is "better than nothing." The question I would ask is, What if CTS had proposed a ¼-acre treatment area? That would also be better than nothing, but it would also be insufficient. Starting with a 1-acre "interim" project

might have been fine in 1980, or 1999. But this is 2015, and the source has been allowed to spread for decades. I've been following this site for almost nine years. Nearby residents have spent the majority of their adult lives with this site hanging over their heads. It's time to do right by those residents and expedite a cleanup that could result in measurable improvements during their lifetimes.

Thank you for your efforts and your time.

Sincerely,

Dr. Jeffrey D. Wilcox
Associate Professor of Environmental Studies
University of North Carolina at Asheville
One University Heights, CPO #2330
Asheville, NC 28804
(828) 232-5184
jwilcox@unca.edu

Zeller, Craig

From: (b) (6)
Sent: Wednesday, October 28, 2015 10:25 AM
To: Zeller, Craig
Subject: CTS site

Dear Mr. Craig Zeller,

I believe that your proposed cleanup of the CTS site would be most beneficial to all concerned if both areas on the site were cleaned up at the same time. I support your aggressive and effective remedy of BOTH areas on the CTS site at the same time.

Best,

(b) (6)
Asheville, NC 28803

(b) (6)

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VIEW MY LISTINGS

Zeller, Craig

From: (b) (6)
Sent: Wednesday, October 28, 2015 1:17 PM
To: Zeller, Craig
Subject: CTS Clean Up

*It is beyond belief that CTS and their lawyers continue to ignore their responsibility to clean up the entire CTS site. They absolutely should be required to take Mr. Zeller's recommendation to clean up the two acres. From a client attorney perspective, one would think that CTS attorneys would advise CTS that it will be less expensive to secure and clean the two acres while the contractors are on site. *

Thanks

(b) (6)

(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Wednesday, October 28, 2015 9:33 PM
To: Zeller, Craig
Subject: Re: At Superfund meeting, EPA offers a choice

I believe that the EPA should push for the CTS proposal to double the proportion to two acres. The spread of TCE, a carcinogen and toxic chemical, into a residential community is unacceptable and should be a top priority for everyone involved. The (b) (6) family, and all other organisms, have the right to live in a toxic-free environment, even if it requires expensive and possibly aggressive measures. The CTS made an honest mistake decades ago, now let them make up for it and go beyond the minimum requirement. CTS can afford to fix this mess, so it seems fair that they do everything in their power to fix it.

Thank you for for your consideration.

(b) (6)

Asheville, NC

Zeller, Craig

From: (b) (6)
Sent: Wednesday, October 28, 2015 11:11 PM
To: Zeller, Craig
Subject: concerning the CTS Superfunds site in NC

I believe that there is simply no excuse for not holding CTS fully accountable for their actions. Yes, to push for a 2-acre cleanup will bring about extra legal issues and possibly make the fight a harder one to win, but so be it. The damage they brought to the community and our planet is simply too awful. I believe that EPA needs to fight because big companies are NOT exempt from answering to their environmental impacts. To settle for a one-acre cleanup is, in my opinion, lazy, cowardly, and goes against everything EPA stands for.

Thank you.

(b) (6)
Beaufort, SC

North Carolina General Assembly
Senate

SENATOR TERRY VAN DUYN
49TH DISTRICT

OFFICE: 515 LEGISLATIVE OFFICE BUILDING
300 N SALISBURY STREET
RALEIGH, NC 27603-5925
PHONE: (919) 715-3001
FAX: (919) 754-3232
EMAIL: terry.vanduyn@ncleg.net
DISTRICT: BUNCOMBE COUNTY

COMMITTEES:

APPROPRIATIONS ON HEALTH AND HUMAN SERVICES
COMMERCE
FINANCE
HEALTH CARE
JUDICIARY I
STATE AND LOCAL GOVERNMENT
WAYS & MEANS

October 28, 2015

Mr. Craig Zeller,
EPA Remedial Project Manager
Region 4, Superfund Division
Atlanta, GA 30303

Dear Mr. Zeller,

It is my understanding that you conducted a meeting on September 23, 2015 at the Skyland fire house where the EPA described the most recent evaluation of the CTS toxic site on Mills Gap Road in southern Buncombe county. You described the history of the site and the proposed next level of cleanup. You also stated that while the proposed one acre cleanup by the CTS corporation will remove a large amount of TCE from the ground, you pointed out that it was very unlikely that this level of cleanup will allow the site to reach a level of TCE that would meet the EPA guidelines to remove the site as a Superfund site. You suggested that widening the area of cleanup would be more cost effective and ensure that site could be returned to meaningful use. If not added to the work plan now, you suggested that it would need to be done at a future date with significantly more cost.

I support your proposal to expand the scope of cleanup to permit the removal of all the toxic waste at the Mills Gap Road site. I represent the residents who reside in that area and would very much like to see that land become a useful part of Buncombe County once again.

Respectfully,

Sen. Terry Van Duyn

Senator Terry Van Duyn
Democratic Whip
49th Senatorial District
Buncombe County, North Carolina

Zeller, Craig

From: (b) (6)
Sent: Thursday, October 29, 2015 11:20 AM
To: Zeller, Craig
Subject: Cleanup of CTS site on Mills Gap Road, S. Asheville, NC

Dear Mr. Craig Zeller,

I believe that your proposed cleanup of the CTS sit would be most effective and beneficial to all concerned if both areas on the site were cleaned up at the same time. I support your aggressive and effective remedy of BOTH areas on the CTS site at the same time.

Thank you for all your efforts on our behalf,

(b) (6)
Asheville, NC 28803

Zeller, Craig

From: (b) (6)
Sent: Thursday, October 29, 2015 11:29 AM
To: Zeller, Craig
Subject: Cleanup of CTS site on Mills Gap Road, South Asheville, NC

Dear Mr. Craig Zeller,

I believe that your proposed cleanup of the CTS site would be the most effective and beneficial to all concerned if both areas on the site are cleaned up at the same time. I support your aggressive and effective remedy of BOTH areas on the CTS site at the same time.

Thank you for all of your efforts on our behalf,

(b) (6)
Asheville, NC 28803

--
(b) (6)
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Repairs & Renovations
828-337-1642
gastpainting@gmail.com

Zeller, Craig

From: (b) (6)
Sent: Thursday, October 29, 2015 11:51 AM
To: Zeller, Craig
Subject: Regarding the Superfund site on Mills Gap Road

I am writing to ask that the EPA use its authority to push the CTS Corporation to double their cleanup proposition for the Superfund site on Mills Gap Road. The toxic chemical TCE and petroleum have now spread off-site with an area spanning almost 100 acres. CTS's proposal to clean up one acre is unacceptable and a blatant disregard of the human rights of the area's residents. The necessary cleanup would cost $4 million dollars, and considering CTS's $404 million in sales, this is a small price to pay for the wellbeing and health of the people on Mills Gap Road. The EPA has the power to stop the contamination and provide a healthy living space that the area's residents have for too long lacked. To deny their justified request for a full cleanup would be inhumane.

Thank you for your consideration.

(b) (6)

Asheville, NC

Zeller, Craig

From: Sen. Terry Van Duyn <Terry.VanDuyn@ncleg.net>
Sent: Thursday, October 29, 2015 3:28 PM
To: Zeller, Craig
Cc: Miller, Angela; nile.testerman@ncdenr.gov
Subject: CTS - Interim Remedial Action Plan

Dear Mr. Zeller,

I represent much of Buncombe County in the North Carolina Senate and have followed the efforts of the people of Buncombe County advocating for remediation of the contamination on the site for several years. I am grateful for the progress that has been made recently, but urge the EPA to insist on a comprehensive cleanup.

In particular, I think it is imperative that the remediation plan be expanded in both breadth and depth to include any adjacent areas that have been shown to be contaminated. It is my hope that the EPA will act decisively and facilitate an expeditious cleanup of the whole area in a way that will restore the air and water quality.

Thank you for your consideration. If there is anything my office can do to assist you in this important work, please do not hesitate to call on me.

Sincerely,

Terry Van Duyn

North Carolina Senate - District 49

(919) 715-3001

Zeller, Craig

From: John Olsen <creeind@yahoo.com>
Sent: Thursday, October 29, 2015 4:26 PM
To: Marraccini, Davina; Zeller, Craig
Subject: EPA Extends Public Comment Period for Proposed Interim Cleanup of CTS of Asheville Inc. Superfund Site to Evaluate Treatment of Expanded Area
Attachments: page 1.pdf; page 2.pdf

My comment is to take the contaminated soils and ENCAPSULATE all the nasty stuff, in 9860 lb Geopolymer "CreeCrete" blocks, so it doesn't leach out ever.

see attached

John O. Olsen
President.
Cree Industries Inc.
tel 904 783 2165
creeind@yahoo.com
www.creeindustries.com
Registered on "SAM".
"Buy Indian act" U.S.A.
Native American Owned.

Cree Indian prophecy.
"There will come a time when the Earth grows sick, and when it does, a tribe will gather from all cultures of the World, who believe in deeds and not words. They will work to heal it. They will be known as 'Warriors of the Rainbow".

CREE INDUSTRIES INC.

Prepared

by

John Olsen

creeind@yahoo.com

Hazardous waste safe disposal method

ROBOTIC CATERPILLAR EQUIPMENT REMOVES HAZARDOUS WASTE

WATER IS EXTRACTED UTILIZING MICROWAVES

GRINDING EQUIPMENT MAKES DRY AGGREGATE

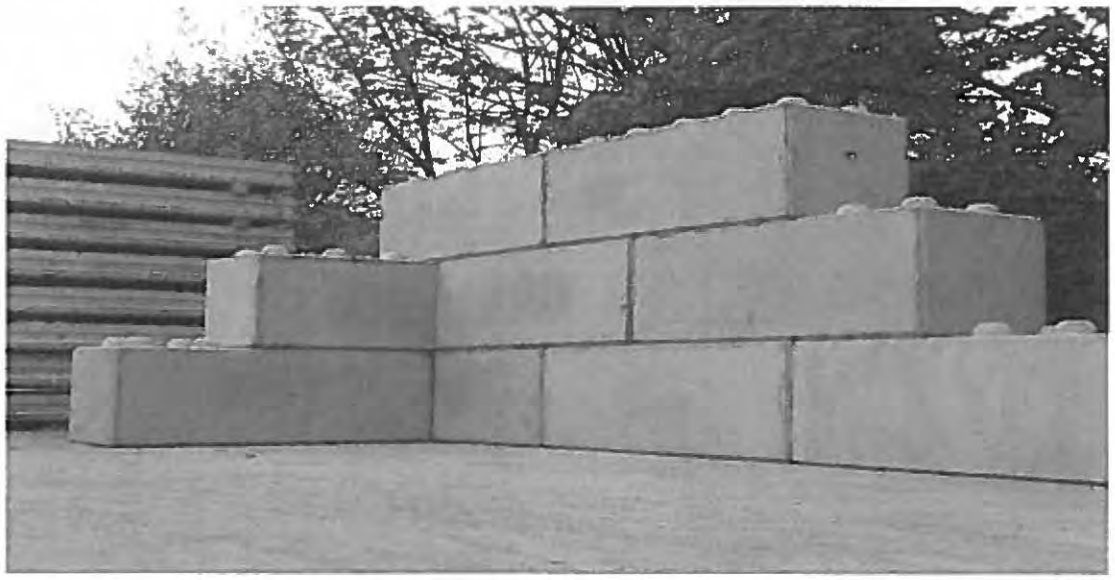
AGGREGATE IS MIXED WITH FORMULA MAKING A "CREECRETE" GEOPOLYMER

GEOPOLYMER IS PLACED IN MOLD MAKING 9,960 LB "CREECRETE" BLOCK

"CREECRETE" BLOCKS ARE THEN TRUCKED SAFELY TO STORAGE

2 pin Blocks of "CreeCrete" 5 feet log 4 feet high 3 feet wide 9,960 lbs

10 pin Blocks of "CreeCrete" 5 feet log 4 feet high 3 feet wide 9,960 lbs



Zeller, Craig

From: (b) (6)
Sent: Thursday, October 29, 2015 9:02 PM
To: Zeller, Craig
Subject: Superfund Site

I believe that the EPA should have CTS clean up at least the 2-acres if not more immediately. This company made a mess that both damages the environment and causes harm to land that isn't theirs. CTS had no problem with making this mess and leaving it to spread and because of that, they show great disregard for the people that live in this community. TCE is a carcinogenic substance and has been known to increase the risk of cancer. It is not safe for people to be living around it and needs to be removed right away. CTS is not a small company either and even though it would cost quite a lot that money, that cost is more than worth cleaning up that piece of land. This cost would not hurt the company in any major way. I urge the EPA to ask CTS clean up this land completely and help the Mills Gap community!

Thank you

(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Thursday, October 29, 2015 9:15 PM
To: Zeller, Craig
Subject: CTS Superfund Site Asheville

Hello Mr. Zeller,
Regarding the proposed cleanup at the CTS Superfund site in Asheville, North Carolina, I propose that the EPA request that CTS expand the cleanup from a one acre area to two acres. Even though cleaning up the source of the trichloroethylene (TCE) is important, the effects of this harmful chemical are being felt beyond the one acre area that would get cleaned up with the first proposal. It is not fair to force people to continue to live in the presence of this harmful chemical, and action and responsibility need to be taken to clean up as much of the affected area as possible. Not only will this ultimately be the better, more permanent solution to the problem, it will boost the image of the EPA and CTS because both parties will help as many people as they can.

Thank you for you time, and I hope you will mention this suggestion.

(b) (6)
Asheville, NC

Zeller, Craig

From: (b) (6)
Sent: Thursday, October 29, 2015 9:32 PM
To: Zeller, Craig
Subject: EPA Comment

The first proposal doesn't get to the heart of the matter; the TCE chemical would still be largely present at the Super Fund site causing severe health issues to the residents of the area. Short-term effects of moderate amounts can be headaches, dizziness, and sleepiness. Short-term effects of large amounts can result in a coma or death. It's been shown that some people who breathe high levels can develop damage to some nerves in their face. Other effects are damage to hearing, seeing, and balance, irregular heartbeat, liver damage, kidney damage, or skin rashes. But more importantly, it can lead to kidney or liver cancer. These effects occur later in life, but for fetuses it can cause developmental effects such as spontaneous abortion, congenital heart defects, central nervous system defects, and small birth weight. While health is an issue in itself, perhaps more appalling is that in CTS's Code of Ethics. Their section on Environmental health states

"CTS Corporation is committed to treat the environment with care, recognizing this issue as global in nature. It is CTS' intent to be recognized as a responsible business committed to continual improvement in environmental management in all business activities. To that end CTS will: Comply with relevant environmental legislation and regulations, and with other requirements to which the organization subscribes. Promote prevention of pollution through Waste Minimization/Recycling activities and other acceptable methods" (CTS Code of Ethics).

If they are so concerned with the environment, why is the company more concerned about money in the situation? Understandably, most large companies would be concerned about their wealth, however it would actually cost less for the companies to pay the $4,000,000 to clean up the entire Super Fund site than to go with the second proposal possibly leading to lawyers. A lawyer costs approximately $150-$500 per hour. Within a single year there are 8760 hours. To hire a lawyer for the amount of time they might take that would likely add up to the span of year, since cases such as these typically last for over a year. The total cost would be $4,380,000. Therefore, I ask that the EPA pushes not for the first proposal nor the second one, but rather use their authoritative powers provided by congress to create a new law that'd force companies to take responsibility of their actions, no matter the time span between when the company owned the property and when they've left.

Thank you for your consideration.

(b) (6)
Asheville, NC

Zeller, Craig

From: (b) (6)
Sent: Thursday, October 29, 2015 9:44 PM
To: Zeller, Craig
Subject: CTS contamination

I'd like to suggest that the EPA ask the CTS to clean up the full two acres, not just on the basis of restoring the land, but also because there is a need to set an example. It is unacceptable for corporations to create mass contamination and then refuse to take responsibility for anything less than the full scope of the problem they created, and by pushing CTS to respond fully, a precedent would be set. It needs to be affirmed that the American people will not tolerate dangerous chemical abandonment, and considering CTS's abundant assets at this point in time, it's not only correct to ask them to clean up their mess but also completely reasonable. Please urge CTS to clear the full two acres.

--

(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Wednesday, November 04, 2015 5:16 PM
To: Zeller, Craig
Subject: Expand the CTS Asheville treatment area

Dear Craig Zeller, US EPA,

The proposed treatment area at the CTS of Asheville site should be expanded to include an adjacent highly contaminated source area (near Monitoring Wells 6 and 7) beyond the proposed one-acre treatment area to the north. Sampling data shows this additional area presents a potent source of TCE that will continue to migrate to the west and southeast and contaminate off-site ground water if left untreated.

In the interest of effectiveness, cost-efficiency, and responsible protection of human health and the environment, we ask that EPA exercise its Superfund authority to expand the treatment area. Doing so will make the interim remedial action more effective as the Electric Resistance Heating (ERH) method is implemented by ensuring that re-contamination of the treated area is not as likely to occur prior to implementation of the long-term, site-wide remedy.

Please move ahead as quickly as possible with the remedial cleanup action and suggested expansion.

Thank you for your consideration of this important request.

Sincerely,

(b) (6)
Marine City, MI 48039

Zeller, Craig

From: (b) (6)
Sent: Tuesday, November 10, 2015 2:50 PM
To: Zeller, Craig
Subject: Expand the CTS Asheville treatment area

Dear Craig Zeller, US EPA,

The proposed treatment area at the CTS of Asheville site should be expanded to include an adjacent highly contaminated source area (near Monitoring Wells 6 and 7) beyond the proposed one-acre treatment area to the north. Sampling data shows this additional area presents a potent source of TCE that will continue to migrate to the west and southeast and contaminate off-site ground water if left untreated.

In the interest of effectiveness, cost-efficiency, and responsible protection of human health and the environment, we ask that EPA exercise its Superfund authority to expand the treatment area. Doing so will make the interim remedial action more effective as the Electric Resistance Heating (ERH) method is implemented by ensuring that re-contamination of the treated area is not as likely to occur prior to implementation of the long-term, site-wide remedy.

Please move ahead as quickly as possible with the remedial cleanup action and suggested expansion.

Thank you for your consideration of this important request.

Sincerely,

(b) (6)
Asheville, NC 28804
(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Tuesday, November 10, 2015 3:01 PM
To: Zeller, Craig
Subject: Expand the CTS Asheville treatment area

Dear Craig Zeller, US EPA,

The proposed treatment area at the CTS of Asheville site should be expanded to include an adjacent highly contaminated source area (near Monitoring Wells 6 and 7) beyond the proposed one-acre treatment area to the north. Sampling data shows this additional area presents a potent source of TCE that will continue to migrate to the west and southeast and contaminate off-site ground water if left untreated.

In the interest of effectiveness, cost-efficiency, and responsible protection of human health and the environment, we ask that EPA exercise its Superfund authority to expand the treatment area. Doing so will make the interim remedial action more effective as the Electric Resistance Heating (ERH) method is implemented by ensuring that re-contamination of the treated area is not as likely to occur prior to implementation of the long-term, site-wide remedy.

Please move ahead as quickly as possible with the remedial cleanup action and suggested expansion.

Thank you for your consideration of this important request.

Sincerely,

(b) (6)
Arlington, IL 60639
(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Tuesday, November 10, 2015 3:01 PM
To: Zeller, Craig
Subject: Expand the CTS Asheville treatment area

Dear Craig Zeller, US EPA,

The proposed treatment area at the CTS of Asheville site should be expanded to include an adjacent highly contaminated source area (near Monitoring Wells 6 and 7) beyond the proposed one-acre treatment area to the north. Sampling data shows this additional area presents a potent source of TCE that will continue to migrate to the west and southeast and contaminate off-site ground water if left untreated.

In the interest of effectiveness, cost-efficiency, and responsible protection of human health and the environment, we ask that EPA exercise its Superfund authority to expand the treatment area. Doing so will make the interim remedial action more effective as the Electric Resistance Heating (ERH) method is implemented by ensuring that re-contamination of the treated area is not as likely to occur prior to implementation of the long-term, site-wide remedy.

Please move ahead as quickly as possible with the remedial cleanup action and suggested expansion.

Thank you for your consideration of this important request.

Sincerely,

(b) (6)
Asheville, NC 28806

Zeller, Craig

From: (b) (6)
Sent: Tuesday, November 10, 2015 4:13 PM
To: Zeller, Craig
Subject: Expand the CTS Asheville treatment area

Dear Craig Zeller, US EPA,

The proposed treatment area at the CTS of Asheville site should be expanded to include an adjacent highly contaminated source area (near Monitoring Wells 6 and 7) beyond the proposed one-acre treatment area to the north. Sampling data shows this additional area presents a potent source of TCE that will continue to migrate to the west and southeast and contaminate off-site ground water if left untreated.

In the interest of effectiveness, cost-efficiency, and responsible protection of human health and the environment, we ask that EPA exercise its Superfund authority to expand the treatment area. Doing so will make the interim remedial action more effective as the Electric Resistance Heating (ERH) method is implemented by ensuring that re-contamination of the treated area is not as likely to occur prior to implementation of the long-term, site-wide remedy.

Please move ahead as quickly as possible with the remedial cleanup action and suggested expansion.

Thank you for your consideration of this important request.

Sincerely,

(b) (6)
Asheville, NC 28801
(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Wednesday, November 11, 2015 11:13 AM
To: Zeller, Craig
Cc: Rep. Brian Turner
Subject: CTS Superfund Clean-Up

Dear Mr. Zeller:

My husband and I are residents which may be affected by the contamination at the CTS Superfund site.

As you are aware, extremely high concentrations of trichloroethylene and other toxins used at the CTS plant have been found in nearby springs and groundwater and on the 9-acre property that was added to the federal Superfund list in 2012. Also, underground TCE plumes have been found in three areas outside of the acre CTS plans to cleanup. Modeling shows the plumes will continue to migrate if not taken care of. These issues need to be addressed sooner rather than later by CTS. They go far beyond the initial one acre clean-up proposed, and the EPA must require CTS to adequately mitigate the serious contamination at these areas.

Sincerely,

(b) (6)
Arden, NC 28704-3040
(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Wednesday, November 11, 2015 9:01 PM
To: Zeller, Craig
Subject: Expand the CTS Asheville treatment area

Dear Craig Zeller, US EPA,

The proposed treatment area at the CTS of Asheville site should be expanded to include an adjacent highly contaminated source area (near Monitoring Wells 6 and 7) beyond the proposed one-acre treatment area to the north. Sampling data shows this additional area presents a potent source of TCE that will continue to migrate to the west and southeast and contaminate off-site ground water if left untreated.

In the interest of effectiveness, cost-efficiency, and responsible protection of human health and the environment, we ask that EPA exercise its Superfund authority to expand the treatment area. Doing so will make the interim remedial action more effective as the Electric Resistance Heating (ERH) method is implemented by ensuring that re-contamination of the treated area is not as likely to occur prior to implementation of the long-term, site-wide remedy.

Please move ahead as quickly as possible with the remedial cleanup action and suggested expansion.

Thank you for your consideration of this important request.

Sincerely,

(b) (6)
Asheville, NC 28806

Zeller, Craig

From: (b) (6)
Sent: Thursday, November 12, 2015 10:58 PM
To: Zeller, Craig
Subject: Expand the CTS Asheville treatment area

Dear Craig Zeller, US EPA,

The proposed treatment area at the CTS of Asheville site should be expanded to include an adjacent highly contaminated source area (near Monitoring Wells 6 and 7) beyond the proposed one-acre treatment area to the north. Sampling data shows this additional area presents a potent source of TCE that will continue to migrate to the west and southeast and contaminate off-site ground water if left untreated.

In the interest of effectiveness, cost-efficiency, and responsible protection of human health and the environment, we ask that EPA exercise its Superfund authority to expand the treatment area. Doing so will make the interim remedial action more effective as the Electric Resistance Heating (ERH) method is implemented by ensuring that re-contamination of the treated area is not as likely to occur prior to implementation of the long-term, site-wide remedy.

Please move ahead as quickly as possible with the remedial cleanup action and suggested expansion.

Thank you for your consideration of this important request.

Sincerely,

(b) (6)
Roswell, GA 30075
(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Saturday, November 14, 2015 9:00 PM
To: Zeller, Craig
Subject: CTS Superfund site cleanup

Attention Craig Zeller,

I live in the surrounding area and do not approve in the CTS spot cleanup idea. I would like to see a larger cleanup area covered which is recommended by the EPA to include the 2.5 acres. I also would like to See Asheville recuperate tax dollars already spend to clean up the site and new water lines.

E-mail Sent by (b) (6)
(b) (6)
(b) (6)
Arden, NC 28704
(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Sunday, November 15, 2015 9:05 AM
To: Zeller, Craig
Subject: Expand the CTS Asheville treatment area

Dear Craig Zeller, US EPA,

The proposed treatment area at the CTS of Asheville site should be expanded to include an adjacent highly contaminated source area (near Monitoring Wells 6 and 7) beyond the proposed one-acre treatment area to the north. Sampling data shows this additional area presents a potent source of TCE that will continue to migrate to the west and southeast and contaminate off-site ground water if left untreated.

In the interest of effectiveness, cost-efficiency, and responsible protection of human health and the environment, we ask that EPA exercise its Superfund authority to expand the treatment area. Doing so will make the interim remedial action more effective as the Electric Resistance Heating (ERH) method is implemented by ensuring that re-contamination of the treated area is not as likely to occur prior to implementation of the long-term, site-wide remedy.

Please move ahead as quickly as possible with the remedial cleanup action and suggested expansion.

Thank you for your consideration of this important request.

Sincerely,

(b) (6)
Asheville, NC 28803
(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Sunday, November 15, 2015 10:02 AM
To: Zeller, Craig
Subject: CTS

Craig,
I live close to the old CTS site and have followed closely the events surrounding the proposed cleanup. It seems irresponsible to me, for the CTS Corp. to only clean the one acre. I believe the local residents deserve a complete remediation of the contaminated larger area.
Many thanks for your continued help with this issue.
Sincerely,
(b) (6)

Sent from my iPad

Zeller, Craig

From: (b) (6)
Sent: Sunday, November 15, 2015 10:06 AM
To: Zeller, Craig
Subject: Cts clean up

Clean up this matter as recommended by EPA ..Do it NOW

(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Sunday, November 15, 2015 10:40 AM
To: Zeller, Craig
Cc: (b) (6)
Subject: CTS Asheville

Dear Mr. Zeller,

The President of Southside Village Homeowners association informed me that according to an article in the Asheville Times, you have received "only 4 dozen remarks from concerned citizens" for clean-up of the CTS site. Although this is surprising to me as well, perhaps it can be explained by a complete loss of faith in the government to bring responsible resolve to this environmental tragedy or..... the folks are naïve enough to believe that the government will do the right thing without prompting your office directly. I fall into the first category. Hopefully you will not find this email as poisonous as the property I am affected by.

Sincerely,

(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Sunday, November 15, 2015 11:03 AM
To: Zeller, Craig
Subject: CTS

It is most important that the CTS sight here in South Asheville be scrubbed of all potential elements that could affect humans and wild life by those responsible

(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Sunday, November 15, 2015 11:59 AM
To: Zeller, Craig
Subject: EPA clean-up

Please, I beg you/the EPA to use all the authority you possess to require CTS to to do a complete clean-up(2 1/2 acres) in order to finally fully respond to the medical needs of residents of the CTS area. This, I know, if these people were family members of CTS corporation owners, they would have acted long ago to finish the job! in stead of dilly dallying around trying to escape their responsibility!

Sincerely

(b) (6)

Asheville,NC 28803

Zeller, Craig

From: (b) (6)
Sent: Sunday, November 15, 2015 12:04 PM
To: Zeller, Craig
Subject: CTS site cleanup

Dear Mr zeller,
My wife and eye live in ssv. We wish to express our strong opinion that the CTS site cleanup should be as aggressive and wide spread as possible, and immediately begun.
Too much time has already elapsed.
All my neighbors in ssv feel the same.
Thankyou for your help and diligence in this matter.
Kind regards,
(b) (6)
Asheville

Sent from my Verizon Wireless 4G LTE smartphone

Zeller, Craig

From: (b) (6)
Sent: Sunday, November 15, 2015 12:47 PM
To: Zeller, Craig
Subject: CTS site

Mr. Zeller,

I am a property owner in Southside Estates and want the CTS site cleaned up as soon as possible.

Sincerely, (b) (6)

Zeller, Craig

From: (b) (6)
Sent: Sunday, November 15, 2015 2:18 PM
To: Zeller, Craig
Subject: CTS site

Please hold CTS accountable to clean up the site completely. We deserve a total response to clean more than just the one acre. Thank you for helping us attain the complete cleanup.

(b) (6)
Asheville, NC 28803

Sent from my iPad

Zeller, Craig

From: (b) (6)
Sent: Sunday, November 15, 2015 4:56 PM
To: Zeller, Craig
Subject: Fwd: Re: CTS cleanup

Wanted to make sure you had our opinion. Good luck on our behalf.

(b) (6)

-------- Forwarded Message --------
Subject: Re: CTS cleanup
Date: Sun, 11 Oct 2015 23:13:50 -0400
From (b) (6)
To

EXCELLENT EMAIL! I'm going to borrow some of it.

Ron

On Sun, Oct 11, 2015 at 9:18 PM, (b) (6) wrote:

We recently attended a meeting on September 23, 2015 at the Skyland fire house where the EPA described the most recent evaluation of the CTS toxic site on Mills Gap Road in southern Buncombe county. Craig Zeller, the EPA representative described the history of the site and the proposed next level of cleanup. He described the proposed one acre cleanup that CTS has agreed to and the need to do further work on the site beyond this one acre cleanup under the plant. While the one acre cleanup will remove a large amount of TCE from the ground, he pointed out that it was very unlikely that this level of cleanup will allow the site to reach a level of TCE that would meet the EPA guidelines to remove the site as a Superfund site. He suggested that widening the area of cleanup would be more cost effective and ensure that the the site could be returned to meaningful use. If not added to the work plan now, he suggested that it would need to be done at a future date with significantly more cost.

We would like to ask for your support to help CTS and the EPA come to a decision to expand the scope of cleanup to permit the earlier removal of all the toxic waste at the Mills Gap Road site. Please contact the EPA and CTS to help us. We are next door neighbors to this site and would very much like to see that land become a useful part of Buncombe County.

(b) (6)
Asheville, NC 28803
(b) (6)

(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Monday, November 16, 2015 7:41 AM
To: Zeller, Craig
Subject: CTS MUST CLEAN ENTIRE TOXIC SITE - NOT PIECEMEAL

CTS contaminated the Mills Gap site and they must clean the entire sight now. While they try to walk away neighbors of their site are bearing the brunt of severe health problems. Please use your mandate to ensure CTS sees their responsibilities through the clean up.

(b) (6)

Sent from my iPad

Zeller, Craig

From: (b) (6)
Sent: Monday, November 16, 2015 3:39 PM
To: Zeller, Craig
Subject: CTS cleanup

As a resident of Southside Village, I hope that the EPS will clean up all polluted areas created by CTS.
Thank you,(b) (6)
Sent from my iPhone

Zeller, Craig

From: (b) (6)
Sent: Wednesday, November 18, 2015 9:06 AM
To: Zeller, Craig
Subject: Public comments re: polluters

Hello Mr. Zeller,
I am for making polluters pay the maximum to clean up their mess.

Ideally, we would have a "Clean Up After Yourself" Law, where the polluter pays to clean up their mess, no matter the cost!! Bankrupt the company? Fine! If you can't afford to make a product and clean up after yourself, or insure against spills, etc., then you should not be in business. If we had such a "Clean Up After Yourself" law, many other laws would be unnecessary. This would apply to all manufacturers, power plants, etc., everyone!

Thanks,

(b) (6)
Melby Corporate Real Estate
828-884-4454 NC or 772-223-6655 FL
cmelby@ccim.net

THE MELBY GROUP
CORPORATE REAL ESTATE

*Site Selection * Property Acquisitions: Lease & Purchase*

Zeller, Craig

From: (b) (6)
Sent: Wednesday, November 18, 2015 10:44 AM
To: Zeller, Craig
Subject: CTS Site on Mills Gap

Dear Mr. Zeller,

I am writing in support of expanding the clean up area for the CTS site on Mills Gap, per the article from the Citizen Times.

I am a resident down stream, closer to (b) (6). When purchasing a home last spring, I wanted to live in the Mills Gap area. I specifically avoided the developments adjacent to the CTS site and those directly downstream as I wanted my kids to be able to play in the streams and on the land without worries of contamination and toxic chemicals. Between that and the Duke plant at Lake Julian, we were pushed us further south from our desired living area.

Thank you,

(b) (6)

Fletcher, NC

Zeller, Craig

From: (b) (6)
Sent: Thursday, November 19, 2015 10:44 AM
To: Zeller, Craig
Subject: Expand the CTS Asheville treatment area

Dear Mr. Zeller,

The proposed treatment area at the CTS of Asheville site should be expanded to include an adjacent highly contaminated source area (near Monitoring Wells 6 and 7) beyond the proposed one-acre treatment area to the north. Sampling data shows this additional area presents a potent source of TCE that will continue to migrate to the west and southeast and contaminate off-site ground water if left untreated.

In the interest of effectiveness, cost-efficiency, and responsible protection of human health and the environment, we ask that EPA exercise its Superfund authority to expand the treatment area. Doing so will make the interim remedial action more effective as the Electric Resistance Heating (ERH) method is implemented by ensuring that re-contamination of the treated area is not as likely to occur prior to implementation of the long-term, site-wide remedy.

Please move ahead as quickly as possible with the remedial cleanup action and suggested expansion.

Thank you for your consideration of this important request.

Kind regards,

(b) (6)
Asheville, NC 28803

Zeller, Craig

From: (b) (6)
Sent: Friday, November 20, 2015 10:14 AM
To: Zeller, Craig
Subject: CTS Site

Dear Mr. Zeller,

In the interest of effectiveness, cost-efficiency, and responsible protection of human health and the environment, and as a resident directly affected by this site, I ask that the EPA exercise its Superfund authority to expand the treatment area. Doing so will make the interim remedial action more effective as the Electric Resistance Heating (ERH) method is implemented by ensuring that re-contamination of the treated area is not as likely to occur prior to implementation of the long-term, site-wide remedy.

Please move ahead as quickly as possible with the remedial cleanup action and suggested expansion.

Sincerely,

(b) (6)
(b) (6)
Asheville, NC 28803
(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Friday, November 20, 2015 1:55 PM
To: Zeller, Craig
Subject: Expand the CTS Asheville treatment area

Dear Craig Zeller, US EPA,

Numerous tests of the area have demonstrated TCE contamination is present in a much wider perimeter than the single acre AMEC and CTS have agreed to deal with.

This issue should have been dealt with decades ago, and if you folks at the EPA want to avoid being partially culpable in another "Love Canal" fiasco, not to mention being responsible for the failing health of local citizens, you need to bring every ounce of your expertise to bear in making sure this cleanup is done properly.

Sincerely,

(b) (6)
Gibsonville, NC 27249

BUNCOMBE COUNTY GOVERNMENT
NORTH CAROLINA

Commissioners Office

Chairman	District 1	District 2	District 3
David Gantt	Holly Jones	Ellen Frost	Joe Belcher
	Brownie Newman	Mike Fryar	Miranda DeBruhl

11/20/15

Mr. Zeller,

I'm writing in regards to the contaminated CTS site located in Arden, North Carolina. I would like to thank you for your efforts thus far, however, I would respectfully request that the EPA expand the proposed scope of work to include the entire site. I request this communication to be included in the public comment concerning the clean-up of this site.

My have heard concerns from my constituents regarding the CTS site. In light of these concerns my hope and request is for the EPA to develop a plan to immediately clean up the entire contaminated site. As you are aware, this issue has met with delays and has plagued the area for decades. Further delay in total site clean up will add further insult to injury.

Therefore, I believe it is in the best interest of the community, the environment, the state of North Carolina, and the U.S. Government to finally move beyond this issue by initiating the immediate clean up of the entire site.

Thank you for your consideration.

Kind Regards,

Miranda DeBruhl

Buncombe County Commission

200 College Street, Room 326 · Asheville, NC 28801
828.250.4001 · 828.250.6076
buncombecounty.org

November 21, 2015

EPA Region 4

61 Forsyth Street, SW

Atlanta, Ga 30303

Att: Craig Zeller

Dear Sir:

I'm writing concerning the CTS Plant site on Mills Gap Road. As many have told you, it is still a harzard for the surrounding area. It must be cleaned up thoroughly as quickly as possible. Please stop putting it (us) off. I was told that you are a fair and honest man who was really trying to help us. I hope that's the case.

My brother and I owned (b) (6) for several years. It was one of the first 3-5 houses built in The Oaks sub division. The well that was built there and housed in this house was supposed to have furnished 5 houses but did more like 3. The neighbor to our right drilled his own well & later died with cancer. My brother died of cancer at 66 and his wife, who was several years younger, died of cancer a year or two ago. At the time we knew nothing of the contamination of that well & thought it was just bad luck. Now we are convienced that the well water did or heavly contributed to their horrible deaths and short lives since we know the well was tested and condenmed-found to contained the poison from CTS.

It's a disgrace that CTS is not being held responsible for all that stuff and forced to thoroughly remove everything and forced to pay those people who suffered so and had thousands of dollars in doctor bills, hospital and pharmacy bills to say nothing of the ruin and hurt of so many families. Is there no fairness in this land anymore? I was told they knew about this for years and that some of our local people, commissioner, etc. knew as well but didn't give a damn. Kept it to themselves. Money talks, does it not?

Thank you for taking time to read this and for any help we receive.

Happy Thanksgiving and a very merry Christmas.

Sincerely,

(b) (6)

My brother/sister-in law:

(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Sunday, November 22, 2015 11:02 AM
To: Zeller, Craig
Subject: humble input regarding the CTS site in Asheville

Craig,

I see the article in this morning's paper. I follow this story from the newspaper and have little other background.

I see some weird things about this.

The CTS plant closed in 1987 and there was no thought about anything until 2006. This seems very weird.

Thirty years later TCE vapor is found in basements. There does not seem to be any underground, but it is in basements! What!

TCE has a density of 1.46 grams per liter; considerably heavier than water. It is not going to rise to the surface after twenty five years!

CTS is using TCE as a degreaser. I can imagine that they used very large amounts of it and may have even had thousands of gallons on hand at any point in time. But it is expensive and they would be distilling and recycling it. Even with no regulations (I am aware that the regulations are fairly recent) economic considerations make me question the source of the thousands of gallons of this expensive liquid. (this is speculation on my part)

I have worked with environmental consultants and know that their very employment depends upon the existence of lots of pollution sites. Pollution is fun. Your job at the EPA depends on pollution.

There is no convincing evidence of illness caused by this (?).
The remaining CTS site, 20 acres, is an awesome piece of real estate. It is flat.

TCE is not very stable and breaks down. This give trichloroethylene a sort of half life to it and the age could be determined. Are the degradation products found in the surface contamination? (I am guessing at the specifics of the chemistry)

Neighborhood groups can be very powerful. These groups provide neighbors with opportunities for social interaction. There are other agendas and the groups can be misguided.

The real theme of this communication is this: I am questioning the integrity of the analytical data.

I have considerable experience in some areas of environmental science. I am a veteran GC/MS operator. I have reported hundreds of TCE quantitations under the 8240 and the ECD detector method 610. I worked for GEO Environmental (long since out of business) from Golden Colorado as a traveling chemist. The lab was in the back of van. It was a cool job. I am speaking from this perspective, not so much from actual knowledge of the CTS site.

Let me add this disclaimer. The CTS neighborhood group received funds to be used to hire a consultant. I applied for this assignment and was not hired.

(b) (6)

(b) (6)

(b) (6)

(b) (6)
Candler NC 28715-8130

Nov 23, 2015

Dear Mr Zeller,

I would like to add my support to an expanded treatment area for the CTS Superfund site clean-up. It seems to me that focusing clean up operations on part of the plume area while TCE keeps seeping from the source is pointless.

We look to the EPA to keep our air and water safe.

Sincerely,

(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Monday, November 23, 2015 11:46 AM
To: Zeller, Craig
Cc: (b) (6)
Subject: Comments regarding CTS Superfund stte clean up plan

Western North Carolina Chapter/Physicians for Social Responsibility, P.O. Box 6689, Asheville, NC 28816 or 10 Chestnut Creek Rd. Candler, NC 28715

Phone contact: 828 633 0892

November 23, 2015

Mr. Craig Zeller,

Remedial Project Manager,

U.S. EPA region 4,

Superfund Division,

11th Floor, 61 Forsyth St. SW,

Atlanta, GA.

Dear Mr. Zeller,

Comment regarding CTS superfund site remedial project from The Western North Carolina Chapter of Physicians for Social Responsibility. These comments are submitted on behalf of the eight member board and the membership.

Dear Mr. Zeller,

Members of our organization have reviewed the plans for proposed clean-up of the CTS Superfund site. We recommend that an expanded area needs to be cleaned-up so as to remove carcinogens such as trichloroethylene from the site.

The proposed treatment area at the CTS of Asheville site should be expanded to include an adjacent highly contaminated source area (near Monitoring Wells 6 and 7) beyond the proposed one-acre treatment area. Sampling data shows this additional area presents a potent source of TCE that will continue to migrate to the west and southeast and contaminate off-site ground water if left untreated.

In the interest of effectiveness, cost-efficiency, and responsible protection of human health and the environment, we ask that EPA exercise its Superfund authority to expand the treatment area. Doing so will make the interim remedial action more effective. We request that the Electric Resistance Heating Method be implemented to ensure that re-contamination of the treated area is not as likely to occur prior to implementation of the long-term, site-wide remedy.

Please move ahead as quickly as possible with the remedial cleanup action and requested expansion.

Thank you for your attention to this important request.

Sincerely,

Terrence P. Clark, M.D.

PHYSICIANS FOR SOCIAL RESPONSIBILITY

WESTERN NORTH CAROLINA CHAPTER

P.O. Box 6689 • Asheville, NC 28816

November 23, 2015

Mr. Craig Zeller,
Remedial Project Manager,
U.S. EPA region 4,
Superfund Division,
11th Floor, 61 Forsyth St. SW,
Atlanta, GA.

Dear Mr. Zeller,

Comment regarding CTS superfund site remedial project from The Western North Carolina Chapter of Physicians for Social Responsibility. These comments are submitted on behalf of the eight member board and the membership.

Dear Mr. Zeller,

Members of our organization have reviewed the plans for proposed clean-up of the CTS Superfund site. We recommend that an expanded area needs to be cleaned so as to remove carcinogens such as trichloroethylene from the site.

The proposed treatment area at the CTS of Asheville site should be expanded to include an adjacent highly contaminated source area (near Monitoring Wells 6 and 7) beyond the proposed one-acre treatment area. Sampling data shows this additional area presents a potent source of TCE that will continue to migrate to the west and southeast and contaminate off-site ground water if left untreated.

In the interest of effectiveness, cost-efficiency, and responsible protection of human health and the environment, we ask that EPA exercise its Superfund authority to expand the treatment area. Doing so will make the interim remedial action more effective. We request that the Electric Resistance Heating Method be implemented to ensure that re-contamination of the treated area is not as likely to occur prior to implementation of the long-term, site-wide remedy.

Please move ahead as quickly as possible with the remedial cleanup action and requested expansion.

Thank you for your attention to this important request.

Sincerely,

Terrence P. Clark, M.D.

Chairperson,

Western North Carolina Chapter

Physicians for Social Responsibility

PHYSICIANS FOR SOCIAL RESPONSIBILITY
WESTERN NORTH CAROLINA CHAPTER
P.O. Box 6689 • Asheville, NC 28816

Katie Hicks
Associate Director
Clean Water for North Carolina
29 ½ Page Avenue
Asheville, NC 28801
katie@cwfnc.org

Craig Zeller
EPA Remedial Project Manager, CTS of Asheville, Inc. Superfund site
US EPA Region 4, Superfund Division – 11th Floor
61 Forsyth Street, SW
Atlanta, GA 30303
zeller.craig@epa.gov

November 24, 2015

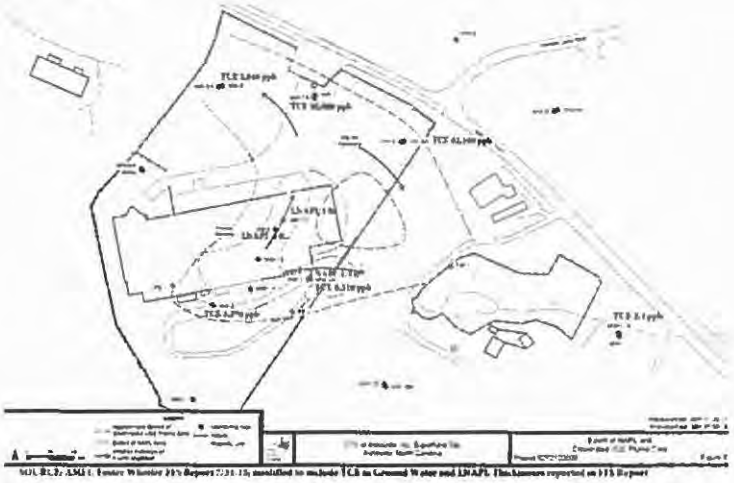
Comments on Proposed Plan for Interim Remedial Action

Mr. Zeller,

Clean Water for NC is a 31-year old science-based environmental justice organization with offices in Asheville and Durham, North Carolina. Our organization has offered community organizing and technical support to the south Asheville community near the former CTS facility for more than a decade. Please accept this letter as our official written comment on EPA Region 4's Proposed Plan for Interim Remedial Action at the CTS of Asheville site in Buncombe County, NC, issued September 30th, 2015. Thanks for this opportunity to provide input, as well as the opportunity to speak on the record at the October 13th public meeting.

Expansion of the treatment area

We strongly agree with community members that the proposed treatment area at the CTS of Asheville site should be expanded to include the adjacent highly contaminated source area (near Monitoring Wells 6 and 7) beyond the proposed one-acre treatment area. As Region 4 pointed out in the Proposed Plan, in your August 26th letter to CTS regarding AMEC's Focused Feasibility Study Report, and during the October 13th public meeting, sampling data shows this additional area presents a potent source of TCE[1]. Site topography and geology mean that this source can continue to migrate to off-site to both the west and southeast if left untreated. Because there are residences in close proximity to the site being affected by these migrating contaminants, this area near wells 6 and 7 is arguably an even larger public health threat than the currently proposed treatment area.



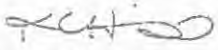
[1] 62,100 ppb TCE at well MW-6A and 52,800 ppb TCE at well MW-7A. Source: AMEC Foster Wheeler FFS report, July 31 2015.

Site-wide Remedial Investigation and Removal of DNAPL
Extremely high levels of TCE have been reported in many of the samples taken in deep soil and weathered bedrock. Investigation, characterization, and design of a remedy to address TCE in DNAPL form should be a top priority for Region 4 as the site-wide remedial investigation continues. The total amount of TCE contained on and off-site has yet to be estimated. In order to eliminate dangerous off-site migration of contaminants into the area's groundwater and soil, the deeper plumes of contamination, and how they move, should be assessed as soon as possible.

While the interim remedial action plan is finalized and implemented, Region 4 must continue to push for the urgently needed full site characterization and site-wide remedy so that exposures to contaminants in the surrounding neighborhood can be eliminated.

Clean Water for North Carolina appreciates the aggressive approach you and Region 4 have taken at this site in the past year, including your demands to meet with CTS directly, work with EPA Superfund staff in the regional and national offices to identify tools to enforce cleanup, and unprecedented transparency with the public. We look forward to working with you over the coming years and finally taking major steps toward removal of toxins in the south Asheville community.

With regards,



Katie Hicks, Associate Director
Clean Water for North Carolina

Zeller, Craig

From: (b) (6)
Sent: Tuesday, November 24, 2015 9:07 PM
To: Zeller, Craig
Subject: CTS Cleanup

Dear Mr. Zeller:

I have been reading articles and commentaries in the paper about the CTS Superfund site over the past year or more. I live about a mile and a half north of this site. The time has long passed for CTS to do what is right and clean up the mess it left decades ago. The company needs to expand beyond the one acre area it proposes to clean up because the TCE contaminants extend beyond that area. I have to wonder if the contaminants will spread if CTS only cleans up the proposed one acre.

This company has done so much damage to the environment and health of families near the site. I hope the EPA will use its authority to get this site cleaned up if CTS refuses to do more than it has proposed. I hope the EPA finds the means to fund the cleanup internally. Despite what CTS says its going to do, I think company executives and lawyers will continue to drag this out if they can. Their actions are morally bankrupt.

My hope is that there will be a similar outcry from the public that occurred with the proposed power line Duke Energy wanted to build from Campobello, SC to its Lake Julian plant. As a result of the public's opposition, Duke will not build the power line. In the CTS case, maybe enough public outrage will shame the polluter into expanding its cleanup.

Sincerely,

(b) (6)

Asheville

Zeller, Craig

From: (b) (6)
Sent: Wednesday, November 25, 2015 10:40 AM
To: Zeller, Craig
Subject: CTS plant

Dear Mr. Zeller

My name is (b) (6) and I am a (b) (6). Since I live a couple of miles from the CTS plant on Mills Gap Road in Asheville, I have chosen this topic for some of my merit badge work. One of my requirements is to interview someone from a branch of government. Would you be willing to answer these two questions ether in an email or a phone interview:

1. What is being done about the CTS contamination?
2. how can young people help?

Please let me know if you are able to help me. I appreciate any help you can give me.

Sincerely --

(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Friday, November 27, 2015 9:23 AM
To: Zeller, Craig
Subject: CTS superfund site in Asheville

Mr. Craig Zeller, Remedial Project Manager

U.S. EPA region 4, Superfund Division

11th Floor, 61 Forsyth St. SW, Atlanta, GA

Dear Mr. Zeller,

Please work to expand the proposed treatment area at the CTS of Asheville to include an adjacent highly contaminated source area (near Monitoring Wells 6 and 7) beyond the proposed one-acre treatment area. As you likely know, recent data has shown this additional area presents a potent source of TCE that will continue to migrate to the west and southeast and contaminate off-site ground water if left untreated.

In order to protect public health and the environment, we ask EPA to exercise its Superfund authority by expanding the treatment area. Doing so will make the interim remedial action more effective. Please utilize the Electric Resistance Heating Method to ensure that re-contamination of the treated area is not as likely to occur prior to implementation of the long-term, site-wide remedy.

We request that you act as quickly as possible with the remedial cleanup action and requested expansion.

Thank you for your attention to this important request.

Sincerely,

(b) (6)

Asheville, N. C. 28803

Zeller, Craig

From: (b) (6)
Sent: Friday, November 27, 2015 9:24 AM
To: Zeller, Craig
Subject: CTS Cleanup Comment

Dear Mr. Zeller,

Having followed the CTS debacle for many years and as a citizen of Asheville, my preference would be for the EPA to take over cleanup and for the EPA to implement a more aggressive source removal strategy.

As an environmental consultant I have participated in the assessment and remediation of sites similar to CTS-Asheville. Budget is always a high priority for responsible priorities. However, I have never seen an RP have so much disregard for human health and the environment that they would drag their feet on a project like this, doing the bare minimum for as long as they can. Having OUTDOUR vapor concentrations in excess of screening criteria is unheard of! We both know that these levels of VOCs have been present in indoor and outdoor air for years. And still they are only proposing a kick-the-can down the road type of approach.

Frankly, I would like to see this Site turned into an example of how contaminated property should be managed. The Rice's property should be purchased and the Site's border expanded to encompass their property. An aggressive source area treatment should be implemented followed by a less aggressive down-gradient treatment option such as HRC injection. CTS has demonstrated time and again that they are an irresponsible RP and should be removed from the decision making process.

Good luck and let me know if I can be of additional assistance.

Regards,
(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Friday, November 27, 2015 9:25 AM
To: (b) (6)
Cc: Zeller, Craig; sherri.knight@ncdenr.gov; peter.schneider@greensboro-nc.gov
Subject: CTS Superfund site delays and Greensboro demolition storage site

Thank you for the latest update on the CTS TCE cleanup.

Amazing it takes so long to remediate such glaring environmental messes. We have one in Greensboro NC that NCDENR has yet to address. D.H Griffin on Hilltop Road is a large open air demolition material storage site that allows potentially toxic runoff to contaminate the headwaters of B.E. Jordan Lake. This is a regional water supply. Details in next email.

http://www.citizen-times.com/story/news/2015/11/26/toxic-vapors-again-problematic-near-cts-superfund-site/76419208/

Red line is unnamed tributary to South Buffalo Creek which is headwaters of Jordan Lake in Chatham County. On left side is DH Griffin at 4716 Hilltop Rd, Greensboro, NC 27407. On right side is Duke Energy transformer storage site (note lagoon).

Zeller, Craig

From: (b) (6)
Sent: Friday, November 27, 2015 9:45 AM
To: Zeller, Craig
Subject: comments on cts property and cleanup

Dear Mr. Zeller,
I have no connections with property owners who have been affected by the CTS contamination but I have been following this situation for a number of years and would like to offer my personal comments. I am a propterty owner and business owner in Asheville and Buncombe County and I am proud that that the city of Asheville took action to give these property owners clean water after their was determined to be contaminated.
I feel that these individuals have suffered long enough waiting for CTS to take action in cleaning up the property. I feel that the EPA should take control of this situation and ensure that the 2.5 acres are totally cleaned up immediately and then after cleanup is finished and it has been totally determined that the area is clean and no more contamination exists, work on getting CTS to pay for the clean up. It is disrespectful to these individuals to have to endure any more time waiting for negotiations between the EPA and CTS. They have endured enough heartache.
I appreciate that EPA is stepping up to help with this situation but please don't make these individuals wait any longer for clean air, ground and water.
Sincerely,
(b) (6)

Zeller, Craig

From: (b) (6) [redacted]
Sent: Friday, November 27, 2015 10:34 AM
To: Zeller, Craig
Subject: CTS Clean Up

Dear Mr. Zeller -

Of course CTS must be made to clean TCE from the groundwater at the larger site. It is so frustrating for those poor neighbors that the EPA Superfund Division is not making this happen FAST! Use all of your power and let's get this done!

(b) (6) [redacted]
Asheville, NC 28803

Zeller, Craig

From: (b) (6)
Sent: Friday, November 27, 2015 10:41 AM
To: Zeller, Craig
Subject: Public Comments re CTS Site

Dear Mr. Zeller,

Thank you very much for the opportunity to comment on the remediation of the CTS Superfund site. My wife, 5 year old daughter and 2 year old son live in the Ballantree neighborhood in South Asheville which is around two miles from this site.

We write to strongly support expanding the area of clean-up to 2.5 miles so that this site is actually permanently cleaned-up. Should CTS refuse to do so, we would fully back the EPA hiring its own contractors to clean the appropriate area and billing CTS later.

As you might or might not know, the area within just a few miles of this Superfund site has seen significant growth with many apartments and homes being built. For example, just in the last two years over 800 apartment units have been permitted or built within a mile of the Sweeten Creek/Mills Gap Road intersection which is very close to the site. The idea that a Superfund site so near this population and business center could be permitted to remain without a permanent solution is mind-boggling.

Many thanks for all of the work that you are doing on our behalf.

Sincerely,

(b) (6)
Asheville, NC 28803
(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Friday, November 27, 2015 12:41 PM
To: Zeller, Craig
Subject: CTS Superfund Site

(b) (6)
Arden, NC 28704

November 27, 2015

Craig Zeller
U.S. EPA Region 4
Superfund Division – 11th Floor
61 Forsyth ST. SW,
Atlanta, GA.

CTS Superfund Site

Dear Mr. Zeller:

I wholeheartedly endorse expanding the clean-up site by an additional 1.5 acres, at minimum. CTS is responsible for the contamination and they are responsible for the thorough and complete cleanup as determined by experts in the field, not experts paid for by CTS. Additionally, they should be fined for the damages the contaminations has and continues to cause.

Although the EPA has been lacking in their response/efforts to pursue CTS for the last 3 decades, the time is now. CTS has shown itself to be a quintessentially greedy company which cares only about its bottom line. I live off Mills Gap road and drive by the site daily. What CTS has done to this area is inexcusable and the fact that they are determining what and where they will clean up and what methods they will use is outrageous.

I think the EPA must pursue CTS with all means available. They have shown their character and their values.

Sincerely,

(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Friday, November 27, 2015 1:13 PM
To: Zeller, Craig
Subject: CTS Corporation

Hi Craig,

Please let CTS Corporation know others in Buncombe County are monitoring their performance beyond the site neighbors This is another case where Superfund responsible parties seem to fail at being responsible. This case has garnered national press so I guess more criticism of CTS Corporation is what's needed.

Other than this Superfund issue, CTS appears to be a useful firm that no doubt employs many. It's hard to understand why they would want to create more madvocates and damage their CSR reputation.

Citizen action should include calling on congress and the White House to revamp the Superfund program so there is less slack based on private property ownership and more public trust doctrine built in backed with greater EPA and community remediation resources and authority.

I happen to be the founder of the current Chemtronics Superfund Community Advisory Group.

Happy Holidays,

(b) (6) Innovation Strategist and Owner
InnovoGraph LLC - Strategic Innovation Services and Management Consulting
PO Box 9446
Asheville, NC 28815
Cell: (b) (6)
Office: 828.298.5706
Email: grant@innovograph.com
URL: www.innovograph.com
AboutMe Page: http://about.me/grantmillin

InnovoGraph makes strategic innovation work.

Zeller, Craig

From: (b) (6)
Sent: Friday, November 27, 2015 2:25 PM
To: Zeller, Craig
Cc: (b) (6)
Subject: CTE and CTS in Asheville.

I understand you are looking for public input in regard to CTS's agreement to clean up only one acre of the Superfund site. I have no personal axe to grind in this, living in Candler and far from the affected area. But as a resident of the Asheville area I hate to see what's happened in part of our community. This should never have been allowed to take so long.

I'm glad CTS is finally taking a little responsibility, but they need to do much more. No, the EPA should not accept this clearly inadequate offer. And shouldn't wait any longer. People's health is on the line. Please arrange the full and obviously necessary clean-up and then bill CTS. I believe you have the right and therefore the obligation to do this.

It would be nice if they came round to what needs to be done. But, if not, please go ahead.

Incidentally, I believe I represent the views of most people here, many of whom won't get around to expressing them. Please don't make this a wasted effort.

Thank you,
(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Friday, November 27, 2015 3:57 PM
To: Zeller, Craig
Subject: CTS superfund site in Asheville

November 27, 2015

Mr. Craig Zeller, Remedial Project Manager U.S. EPA region 4, Superfund Division 11th Floor, 61 Forsyth St. SW, Atlanta, GA

Dear Mr. Zeller,
Please work to expand the proposed treatment area at the CTS of Asheville to include an adjacent highly contaminated source area (near Monitoring Wells 6 and 7) beyond the proposed one-acre treatment area. As you likely know, recent data has shown this additional area presents a potent source of TCE that will continue to migrate to the west and southeast and contaminate off-site ground water if left untreated.
In order to protect public health and the environment, we ask EPA to exercise its Superfund authority by expanding the treatment area. Doing so will make the interim remedial action more effective. Please utilize the Electric Resistance Heating Method to ensure that re-contamination of the treated area is not as likely to occur prior to implementation of the long-term, site-wide remedy.
We request that you act as quickly as possible with the remedial cleanup action and requested expansion.
Thank you for your attention to this important request.
Sincerely,

(b) (6)
Arden, NC 28704

Zeller, Craig

From: (b) (6)
Sent: Friday, November 27, 2015 8:57 PM
To: Zeller, Craig
Cc: Dr. Terry Clark

After having read and heard directly about the large number of family members that have developed malignancies at and around the CTI EPA Superfund Center in Arden, NC, I request that the recommended additional Acre of land be included in the cleanup of the site.

Thank You, (b) (6)
Physician for Social Responsibility
(b) (6)
Hendersonville, NC 28791

Zeller, Craig

From: (b) (6)
Sent: Saturday, November 28, 2015 11:33 AM
To: Zeller, Craig
Subject: Mills Gap Superfund Site public comment

Dear Mr. Zeller,

Nov. 28, 2015

In a previous FOIA request to the EPA for any and all scientific reasons for transferring the CTS site from the Removal Branch to the Remedial Branch, we were informed, after very long delays, that no such reasoning exists in the files for that action.

The latest revelation of an increased level of TCE vapor underscores ***once again*** the correctness of the EPA's 2002 call for the **time-critical removal** of the spreading toxins to safeguard public health. In all respects that report's warnings of delaying cleanup has proved 100% correct.

Therefore, the established scientific facts demand implementation of the long delayed time-critical removal response ***originally mandated*** **by EPA**.

After the latest toxic revaluations, what other considerations regarding an immediate cleanup could EPA still deem more important than the well established scientific facts?

Sincerely,

(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Saturday, November 28, 2015 10:46 AM
To: Zeller, Craig
Subject: CTS

Mr. Zeller,

CTS is still in business - they have polluted an untold number of acres, ruined property values and an untold number of lives -- and -- they are telling the EPA what to do? How is that even possible? What are America's values? If it were me or any other shlepper like me, we would have been jailed 15 years ago.

One of the newspaper articles I read stated CTS would hire high priced lawyers if they didn't get their way -- so what? What does that have to do with anything? They were negligent -- they are criminals -- they are criminals!

The EPA is the environmental protection agency of the United States - protect the environment! If CTS doesn't pay then lien them, attach their assets - attach assets of executives and owners -- just like the EPA would have doed to me -- fifteen years ago.

Come on, get it together -- there's no ambiguity here - do your job --.

(b) (6)
Fletcher, NC 28732
(b) (6)

Zeller, Craig

From: (b) (6)
Sent: Saturday, November 28, 2015 12:44 PM
To: Zeller, Craig
Subject: CTS site

I own a rental house on the other side of the CTS site on Mills Gap Rd. (b) (6). It has a creek flowing through the back yard that comes from the CTS site. I don't know if this monitored or not. I do know that several "activists" visited my tenants several years ago with skull and cross-bone literature, and they promptly moved out. This entire problem needs fixing, including getting to the plume of contaminated water and withdrawing it. It is a health and economic problem.
Paul Saylor

Zeller, Craig

From: (b) (6)
Sent: Saturday, November 28, 2015 5:51 PM
To: Zeller, Craig
Subject: CTS

Dear Craig and EPA,

I haven't avidly followed the case, I don't know every detail. I know the generalities of the case. I have lived here 30 years in Asheville. I went to the last meeting that was held a month ago. I was so disheartened to see the suffering.

I have heard of this case, it's tragic that CTS has absolutely caused people to die. There's been proof of the connection. Residents have had to give every effort to fight this fight as they struggled with the death of their loved ones.

I wish the families could be given millions of dollars to get over the pain and enjoy what life they and their loved ones have left to live. They have fought for many years and are tired.

Since this has not happened, I urge the clean up to consider the 2.5-acre site cleanup plan. There is a large contaminated area that needs to be addressed.

I hope this can be approved and get this process to commence as soon as possible.

Thank you for your consideration,

Julee

--

(b) (6)
Licensed Cosmetologist (b) (6)
B. A. Psychology, UNCA
Member of The Southern Highland Craftguild

Zeller, Craig

From: (b) (6)
Sent: Saturday, November 28, 2015 6:59 PM
To: Zeller, Craig
Subject: CTS contamination

Dear Mr. Zeller:

My family and I are residents in the Glen Crest community which may be affected by the contamination at the CTS Superfund site. We have three children and greatly enjoy our time outdoors and hiking in the Arden area.

We are very discouraged by the minimal cleanup effort thus far and discussion of further proceedings. As you are aware, extremely high concentrations of trichloroethylene and other toxins used at the CTS plant have been found in nearby springs and groundwater and on the 9-acre property that was added to the federal Superfund list in 2012. Also, underground TCE plumes have been found in three areas outside of the acre CTS plans to cleanup. Modeling shows the plumes will continue to migrate if not taken care of. These issues need to be addressed sooner rather than later by CTS. They go far beyond the initial one acre clean-up proposed, and the EPA must require CTS to adequately mitigate the serious contamination at these areas.

Sincerely,

(b) (6)

Sent from my iPhone

DAVID GANTT
CHAIRMAN, BUNCOMBE COUNTY COMMISSION
200 COLLEGE STREET
ASHEVILLE, NORTH CAROLINA 28801

November 29, 2015

Mr. Craig Zeller
U.S. EPA Region4, Superfund Division
11th Floor
61 Forsyth St. SW, Atlanta, GA
zeller.craig@epa.gov

Re: CTS plan of remediation

Dear Mr. Zeller,

As Chairman of the Buncombe County Board of Commissioners, I am writing to comment on the plan of remediation of the former CTS property recently submitted to the EPA by CTS and currently under consideration. I understand that the proposed CTS plan is intended to address the terms of the 2004 Administrative Order and Settlement Agreement on Consent (AOC) for Remedial Investigation and Feasibility Study between EPA and CTS.

Since the issue first arose in 1985, the Buncombe County Commission has been very concerned about the dangers to the health and welfare of our citizens posed by contamination at the former CTS facility. In 2008, four wells near the CTS site tested positive for ground water contaminates including TCE, threatening the drinking water supply. The County responded to this information by authorizing the expenditure of $225,000 to construct City of Asheville water lines to The Oaks subdivision. In 2011, to assist with the remediation of the property, the County paid $173,700 to demolish the CTS facility. In 2014, to insure a safe drinking water supply, the County agreed to pay for the installation of more City water lines to homes located within a one mile radius of the CTS site, at a cost of $1,644,555.

The Board of Commissioners agrees with its citizens that the remediation process has taken far too long. Whatever plan is approved by EPA should be a full and comprehensive solution which assures the long term safety and comfort of the citizens in the vicinity of the property. If the EPA, the voice of the citizens, believes that it is necessary for CTS to remediate 2.5 acres instead of the single acre in the CTS plan, the Commission believes that EPA should adopt the more comprehensive plan, even if CTS threatens litigation. EPA has the authority to conduct the cleanup and then assess the cost to CTS, which power should be exercised as the most effective way of resolving the long-standing environmental problems created by CTS.

In addition, the plan should require CTS to reimburse the citizens of Buncombe County for the $2,043,255 in expenses incurred by the County as "necessary costs of response" to the threat to public safety created by CTS' contamination of its property. Such expenditures are clearly justified under the national contingency plan for remediation of contaminated sites.

I sincerely hope that EPA will agree with our position on this important health and safety matter. Please let me know if I can provide any further information or comment on the remediation plan. Thank you in advance for your consideration.

Very Truly Yours,

David Gantt, Chairman
Buncombe County Board of Commissioners

Cc: Wanda Greene, County Manager

Zeller, Craig

From: Joe Belcher <joe.belcherforbuncombe@gmail.com>
Sent: Sunday, November 29, 2015 1:35 PM
To: Zeller, Craig; Joe Belcher
Subject: CTS concerns

Craig Zeller,

This email is to express concerns from my constituents that live in the vicinity of the old CTS facility in Mills Gap Rod in Asheville NC.
Current efforts to clean up this site have fallen short of expectations of a full and immediate clean up.
Families in this neighborhood have waited long enough and endured too many delays. Expand the efforts to include all those effected neighbors.
Please, no more delays. Start immediately.

Sincerely
Joe Belcher
Buncombe County Commissioner

Zeller, Craig

From: (b) (6)
Sent: Sunday, November 29, 2015 3:30 PM
To: Zeller, Craig
Subject: CTS Superfund Site in Buncombe County, North Carolina

November 29, 2015

Mr. Zeller,

The repeated and extensive evaluations of the CTS site, the delays in naming it a Superfund site, delays that have allowed the chemicals to spread in the groundwater, have all gone on too long! Now is the time for action on this site which has deteriorated environmentally for almost 30 years. It is time for the EPA to take action and demand of CTS that it do a total cleanup of the site that extends to the boundaries of the damage rather than just to one acre. The residents in this area have suffered in both fear and health problems for three decades and they deserve to have a healthy environment where they live.

As citizens of Buncombe County, North Carolina we are specially concerned. As citizens of the United State, we expect better environmental stewardship than we have seen in this situation.

(b) (6)
Asheville, NC

U.S. Environmental Protection Agency
Superfund Proposed Plan for Interim Remedial Action
CTS of Asheville, Inc. Superfund Site
Asheville, Buncombe County, North Carolina

I, (b) (6) [redacted], provide the following comments and opinions in support of the US Environmental Protection Agency expansion of the treatment area at the CTS of Asheville, Inc. SUPERFUND Site, Asheville, Buncombe County, North Carolina.

Mr. Craig Zeller, EPA Region IV Superfund Remedial Project Manager, is quoted in numerous news articles to recognize the benefit of immediate expansion of the Interim Remedial Action in consideration of the costs to the iminent Final Site Plan. I would hope the EPA consideration of benefit does also include the nonmonetary costs of decreased impacts to the Human and Natural Environment an increased effort of the Remedial Action could provide.

I was directly exposed to TCE from 1988 to 1992, as NCDOT made the decision to supply TCE to contractor's asphalt testing labs across Western North Carolina. I was forced to load TCE in unmarked Blue plastic containers and transport in the trunk of Motor Fleet Management Chevy Caprice. I established a new Resident Engineer office just a few miles from the CTS site in 1992. And I believe the actions of the State of North Carolina politicians have been intentionally detrimental to the health and safety of its employees, the public and the environment.

Below is a recent article from the Carolina Journal which evidently supports my conclusion.

In a letter dated Oct. 30, Heather McTeer Toney, a regional EPA administrator, cautioned department Secretary Donald van der Vaart that the state

Zeller, Craig

From: (b) (6)
Sent: Sunday, November 29, 2015 6:54 PM
To: Zeller, Craig
Subject: CTS Cleanup until

I have followed this clean up project from the beginning and have attended some of the meetings here to address issues.

My son-in-law heard from an aunt of his about the waste being released. She, in fact, carried buckets of waste to the little creek which ran west from the site to Sweeten Creek. She told him this when he questioned the fact that her hands were often stained blue from the material. No, we cannot refer you to her personal testimony as she died several years ago of cancer.

I lived with my family in a mobile home park down the hill from the site for a number of years. The creek carrying the runoff ran through a little pond on the property where we had our home. I was not aware of the fact that the discharge 36" pipe ran under our home from one end to the other until we had a serious storm (which killed several people in a park on the other side of the ridge) and the line developed a rupture. A short while later, it was necessary to prop up my unit with an I beam above the washed out area.

We continued to live there after I married (b) (6) and we changed to a double wide unit and continued to live above the discharge line. For a total of eight years, we were exposed to the water discharged from the plant.

Since that time, I have lost my husband to cancer; my son has had surgery for cancer, and I developed disabling chronic fatigue and fibromyalgia. Can I attest to a direct connection? My son had an unusual kidney cancer.

As we review the situation of the (b) (6) family, we can only be grateful that we moved to property quite a distance away from the problem. That does not mean that we escaped the damage done. I cannot ask you to do less than impose serious injury to CTS and to clean up this site and bill them. I wish the people who still reside there would do as we do and relocate.

THIS SITE IS A DEATH SENTANCE FOR THOSE WHO LIVE AT THE CLEAN UP SITE. PLEASE CONSIDER A SERIOUS AND EFFECTIVE CLEANUP.

Zeller, Craig

From: (b) (6)
Sent: Sunday, November 29, 2015 11:44 PM
To: Zeller, Craig; Miller, Angela
Cc: (b) (6)

Subject: STATEMENT for Public Comment on EPA / CTS proposed "clean-up" at CTS of Asheville, Inc. NPL Superfund site
Attachments: Public Comment.docx; ATT00001.htm

Tate MacQueen
VP CAG
November 15, 2015

Comment For EPA Region IV / CTS Proposed Response
Too Little / Too Late?

Given the history, the unyielding and immeasurable history at the CTS of Asheville site, what hope is there now to address, effectively, the toxic disaster that has been decades in the making? Regardless of the revolving door of Emergency On Scene Coordinators, Site Assessment Managers and Remedial Project Managers- the message has been loud and clear: The victims will never see a substantial clean up and there will be no accountability. Once again we hear the straw man argument from EPA Region 4 that, "We don't want to get lawyers involved." CTS Corp. sued the USEPA in an effort to come off the National Priorities List and LOST. Yes, lost to the USEPA's lawyers. To argue that something is better than nothing as it pertains to going along with the perpetrator's solution to address the most minuscule sized area, in a manner that there is insufficient evidence of efficacy as it relates to fractured bedrock with volatile organic compound contamination and, if that was not bad enough, with a groundwater flowing in three separate directions. There is a shallow groundwater divide at the top of a relative topographic high where the water flows from the divide on one side to the east and on the other side the groundwater flows to the west. Then there is a deeper groundwater flow from south to north. EPA Region 4 has paid essentially no attention over the span of its history of activities at the CTS site to the direction of the groundwater flow that moves from the CTS site to the west/northwest, which happens to be where Southside Village, a $30,000,000.00 private gated community, is located. EPA Region IV essentially focused its attention to the east/northeast in the direction of the (b) (6) families and others, who are of modest means as working class people. It appears that this was part of an attempt to shield the agency from its liability after it tried to conceal the true nature of the site by creating an artificial CERCLA site on the (b) (6) property in 1999. The third direction of groundwater contamination is the deeper bedrock feature that drives the plume north impacting Chapel Hill Church Road, Pinners Cove Road, The Oaks Subdivision,

School Road and High Valley Forest Subdivision. The nature of this site, the malfeasant and malicious response over the last three decades dictates that arguments based on EPA Region IV's costs or CTS's costs should be dismissed as should any plan that does not address, as its priority, the actual source of contamination that is in the Dense Non-Aqueous Phase Liquid approximately 35 to 50 below ground surface. Anything short of using the most aggressive, effective and time sensitive technologies is unacceptable. Additionally, anything that does not address not only the DNAPL at refusal but does not address the appropriate circumference of area to be treated is unacceptable. If EPA Region IV goes along with the perpetrator's plan, designed by the responsible party, which has had little to no regard or remorse for what it has done to the actual victims like the (b) (6) families, the (b) (6) the (b) (6), the (b) (6), the (b) (6), and all the other families that consumed toxic water and or breathed toxic air, then it will serve as further evidence of the nefarious relationship between EPA Region IV's Franklin Hill, Don Rigger, Fred Stroud, Jennifer Wendel, David Andrews, Terry Tanner, David Dorian, Stephen Ball, Carter Williamson, Samantha Urquhart-Foster, Jon Bornholm to name a select few that knew and did nothing.

Now that it is almost the close of 2015 and a full 25 years since EPA Region IV first confirmed migrating contamination onto the (b) (6)' property and what became Southside Village and we are to be pacified with the *something is better than nothing* storyline. Because nothing was done of consequence over the last 25 years, there is little to nothing that can be done about the contamination that has been released. There has been nothing short of abuse for the (b) (6) families who continue to endure with nothing done in the name of justice for them or the (b) (6) for that matter. The fact that the (b) (6) in particular were never relocated is abhorrent. What compounds matters is the brazen and recklessly cavalier mentality of those from EPA Region IV who never had the moral high ground to lose. When EPA Region IV held its last community forum for public comments at TC Roberson High School, we listened to Franklin Hill try to essentially disavow the past and those that bring it up because he wants to move forward and does not want to deal with those he accuses of living in the past. Mr. Hill, I can only hope would appreciate how foolish that mindset is. For those who do not learn from history are destined to repeat it. A more appropriate synopsis of what this community has faced cannot possibly exist. We have been stuck in a testing, retesting, analysis to paralysis existence with EPA Region 4. EPA Region IV has yet to even put up Superfund Site warning signage that can

actually be seen from Mills Gap Road, EPA Region IV has never changed the signs that give the wrong CERCLA site name that should never have been created on the (b) (6) property concerning their polluted springs and air that CTS Corp caused AND EPA Region IV has never done anything to date to mitigate the source of contamination at the CTS site below the building foot print. EPA has claimed, as Franklin Hill has championed, that the Soil Vapor Extraction System pulled more than 6,000 pounds of TCE / VOC's out of the ground, but never once explained the method for quantifying the claimed amount. EPA Region IV admitted the system was a failure in January 2010, did not alert the community that the system was destroyed by copper thieves in the summer of 2010 and kept writing updates in a manner that suggested the device was still operable even though it was destroyed in 2010. The SVE system was not designed to run past 20-24 months once it went operational in the summer of 2006. EPA Region IV never bothered to alert the community that the system was not designed for compacted non-permeable soil like we have at the CTS site, and when the VOC's are mixed with lower volatility wastes, like at the CTS site, it gets even less effective. UESPA's own guidance dating back to January 1992 in a document numbered 10802875 (check page 8) from EPA Region IV's compendium of files states the SVE system is not designed for these conditions. This is an example from history that when EPA allows price over efficacy, the people, wildlife and environment lose. Regardless of these inconvenient facts: the SVE system failed because the levels of VOC's increased at the (b) (6) property where the groundwater expresses through springs, the highest levels ever detected in the soil at Boring Hole 3 on May 8, 2001, hit 830,000 parts per billion at 34-36 feet below ground surface for TCE and yet the levels when tested over decade later at the same location hit 1,120,000 ppb at about 28 feet below ground surface. The highest level of TCE in the groundwater tested by EPARegion IV hit 42,000 ppb for TCE at Monitoring Well 6A back in the Phase I and II testing in 2008-09 and then the levels hit 86,100 ppb for TCE not too far from the original Boring Hole 3 location. Clearly it did not work, but what remains important is that EPA Region IV under Don Rigger and Franklin Hill acted like it was a success. This takes us to today. How can we, as (b) (6) (who lost his mother, father and nine aunts and uncles to cancer living within 1.5 miles of CTS and all were well water users) once said, *trust* the EPA after years of systematically being dishonest? As a footnote to his point, our Community Advisory Group went back and looked at the locations of EPA Region IV's test wells and all too frequently the GPS coordinates did not match the street addresses in the Field Logbook Notes and in too many

cases were off by many hundreds of feet leaving us to wonder who had contamination in their water and whose did not. Again the issue is trust… and it is the past that teaches us to be cautious when dealing with this type of habitual abuse.

Franklin Hill chastised those of us that know what EPA Region IV did here and what CTS was known by EPA Region IV to have done to contaminate our community. In this statement that I would like to remind Mr. Hill that after the close of apartheid in South Africa, the consensus was not to move forward by ignoring the past. The country engaged in the accountability component so that the people could move forward by way of justice visa vie the Truth and Reconciliation Commission. Imagine asking the victims to forget the past and let the systematic abusers, torturers and murderers get away with it? On a much smaller scale, but just as visceral, Mr. Hill makes that request of us. It was Mr. Hill who waited until 2013 to admit that EPA Region IV accessed the (b) (6) property in 1990 but never told them of its presence in 1990 or the findings of migrating contamination in 1990 on the (b) (6)' private property. EPA Region IV did not even bother to ascertain what their water supply came from in 1990. It was only when prompted that Mr. Hill offered an apology in 2013 because he thought that was what (b) (6) wanted to hear during their meeting at Congressman Meadow's office in Hendersonville. It was Mr. Hill that made the unprecedented admission while not taking responsibility for Don Rigger and Fred Stroud creating a bogus CERCLA site on the (b) (6) property on 8-23-99 and naming it in a manner that shielded EPA Region IV and CTS Corp for contamination that EPA Region IV had documented under the original and only valid CERCLA site at the CTS site. This violated the whole point of CERCLA, RCRA and SARA to the core. To create a fake CERCLA site, put on the victims' property without telling them and running for better than 11 years and then try to aw shucks your way out as Don Rigger attempted in September 2010 is nonsensical. You don't get to claim negligence if it is premeditated and orchestrated for 11 years and the only reason you acknowledge it is because you got caught. There is a reason that the Don Rigger, Fred Stroud and Jennifer Wendel, as alleged conspirators, do not show up on EPA's financial accounting for the "work" they did in working over the (b) (6) in 1999. The other facet to this is the reality that there are likely other sites within Region IV's inventory that have been treated in a similar fashion that allows the culprits to elude accountability and shields the EPA while leaving residents, the wildlife and environment in jeopardy.

This plan on prima facia looks like it is more cosmetic that effective. It does not address the DNAPL concerns, it is written in a manner that demonstrates that it is more focused on the shallow contamination in the light non-aqueous phase liquid that is a mixture of petroleum and TCE, when the real danger comes from the ever-present and unrelenting release of contamination in the DNAPL zone. It is, as (b) (6) states, like a tanker truck turned over and has been releasing contamination only the truck is underground. If it were above ground and in sight, the response would be much different and more appropriate we hope. However, since that release has been ongoing for decades and the levels have only increased, I would clarify that comparison by describing like a tanker ship, rather than a tanker truck, that ran aground and ruptured. Since it has been out of everyone's sight and out of EPA Region IV's and CTS's minds, the lack of response is at least explainable and unjustifiable. Let's be clear, if this response is more cosmetic as part of that straw man logic then it will be akin to corrupt detectives telling the victim of spousal abuse to learn how to more effectively apply concealing make-up.

I would like to add that if, as the executive from CTS Corp stated at the TC Roberson Community Forum put it, CTS is excited to work with the community, after years of apathy, then lets start by finding the money to relocate the (b) (6) families (all three) and compensate them with a more commiserate amount and the same for the (b) (6) family. Any and all actions should be conducted away from any control or influence by the likes of Don Rigger and Franklin Hill. This should be conducted under the 2002 Emergency Action Memorandum for Enforcement under the jurisdiction of the REMOVAL Branch and not the REMEDIAL Branch. EPA Region IV should use the broad and expansive powers set forth under CERCLA and CFR 300.415 (b) and fund the most effective and time sensitive response and bill CTS Corp up to three times that amount as prescribed under federal law if CTS Corp were to baulk. EPA Region IV has yet to produce an environmental and a wildlife impact statement on the proposed action and that is something that those without a voice deserve because the silent victims included the wildlife and the environment.

As far as the costs go… EPA Region IV spent just over $326,000.00 total up and through 2007. After that EPA Region IV spent millions (over $10,000,000.00) from 2008 to current and none of it was spent on addressing the actual source. To decry cost as an issue here as a federal agency staring into the eyes of a corporation that routinely hits $500,000,000.00 in annual sales

is a flimsy argument to make. It is as if EPA Region IV and CTS were as much trying to run the sand out of the hour glass, but the VOC's out of the sand itself as well.

In closing I would like to add an addendum to my statement for the record which comes from 2 emails I sent back May 2015. These emails will serve as part as a historical basis to offer perspective and insight into what transpired here, regardless of whether any accountability for those responsible or justice for those who are so desperately owed it is ever made manifest. We would have never learned the whole truth of what happened here if it were not for WLOS News 13 and Investigative Reporter Mike Mason because they obtained a 62,922 page FOIA response from EPA Region IV in June 2013. Despite threats and intimidation tactics to get back the FOIA and have all copies destroyed, WLOS News 13, Mike Mason and the other reporters at the station were committed to the truth and they did not relent. Other news organizations and their reporters like the Citizen-Times, the Mountain Xpress, 880 The Revolution, The Pete Kaliner Show, Don Yelton's Public Access TV show, The Asheville Tribune, the Black Mountain News, The Hoofbeat, USA Today, MSNBC, The Atlantic with Kevin Mauer and the Associated Press with Mitch Weiss and others have played major roles in advancing the truth, too.

It is interesting that in 2000, the (b) (6) had to file a FOIA just to try to understand what happened and like so many other documents we have mentioned, the FOIA files were incomplete. Pages were pulled and, of course, at that time the families were on their own… That troubling pattern of alleged violations of US Code 42 Section 9603 existed before and it has existed since. The 2013 FOIA revealed the degree to how committed some at EPA Region IV were willing to go because it is Ms. Wendell's paperwork in her official National Priority List summary that commingles files, alters pages numbers and factually misrepresents the actions taken by her colleagues and herself during a time when she was the Superfund Section chief for EPA Region IV for the state of North Carolina. So, I am adding the addendum because USEPA and CTS Corp have yet to provide an accurate, fact-based site history description in any of their reports to reflect what really happened to this community. I am adding this addendum because people like Franklin Hill would rather re-write history than allow that history to be revealed.

Respectfully-

(b) (6)

ADDENDUM

{please excuse any grammar and spelling mistakes in the addendum as it is more than 10,000 words in length}

Twenty-five years ago, on 4-20-90, this EPA Complaint Form 1300-6 was send from the state of North Carolina's Robin Pursell to EPA's Keith Masters. (file 10802884)

When you read it, imagine the heartbreak the victims felt when they first saw this file. Please consider the betrayal they have felt and suffering they have endured. Keep in mind we obtained it buried in 62,922 pages of documents.

I think you will see that this is a very damaging document to the narrative put forth by those, like Mr. Franklin Hill who would hide behind claims that "there was no negligence from anyone in Buncombe County."

The document is self-explanatory, but it does warrant some editorializing. It goes to the heart of what has been done to conceal this most ugly reality.

This document is referred to in Wendel's NPL Scoring Report in both version 1 3/2011 and the final version from 3/2012. She does not bother to address the root concern about the (b) (6) family's well-being. Obviously, NO one from EPA checked on the (b) (6) family members and their exposure. This is not an isolated incident with EPA Region 4 or the state failing to follow up on health concerns for the people in South Asheville. EPA and NCDENR were informed and it has been repeatedly published that there were streams and creeks that may have caused illnesses with links to CTS, neither EPA nor NCDENR ever sampled in those creeks to either verify the presence of contamination and / or to safeguard the children of other families. Thankfully, those streams were tested (not EPA or NCDENR) and they were clean because of the geography (distance

and mountain ranges). The issue remains, why EPA and or NCDENR never did their own sampling given the treatment of the (b) (6) families and (b) (6) families... FYI - there are those half-way cases, where with (b) (6) wife and 10 year old grandson the EPA finds the water to be contaminated with enough TCE that it exceeded the calibration of the analytical device. EPA told the (b) (6) to stop using their water, and waited several months to reveal the actual number for the sample was 1400 and 1290 pp. for TCE. In the public statements that followed, EPA stated that the levels were merely "elevated" when they almost 500 times the state limit. There were the 4 Emergency Removals in my neighborhood and EPA saying the chemicals found were not associated with the CTS site, when pentachlorophenol and ethylhexylpthalate (sp) was found repeatedly throughout EPA testing at the CTS of Asheville, Inc. site. Then there were the events of 2007 and 2008. David Dorian insinuated that if (b) (6) would be quiet, then he "would see what could be done to get her a filter for her water" when it came back with 57 ppb for TCE in November 2007. When the whole team of EPA Region 4 (and others from outside Region 4) and NDENR to present preliminary findings and EPA with Dorian presented slides with information regarding Acetone shown as Non Detect for the sample that was taken about 5 ft from CTS's barrels in (b) (6) yard where he has toddlers playing. Why go to all this trouble to treat people this way? Why would Wendel blame the victims (b) (6)) on July 10, 2008, after a community meeting coming down the fire station stairs when she said, "ya know, I put a lot of the responsibility on the (b) (6) because they should have moved."? Why should the (b) (6) have moved if they did not know to move and the leverage needed to move was withheld from them by EPA and Wendel herself when she was issuing accepting No Further Remedial Action Planned designations for the CTS of Asheville, Inc. site on the same day the EPA found the contamination at its highest ever level (until January 2014) on May 8, 2001 for the Mills Gap Road Groundwater Contamination site, which was placed on the (b) (6) property without the (b) (6) ever being made aware of that CERCLA designation. It is truly shameful.

Why are the records kept for the CTS the way they are at the library, after being withheld from the community and victims in violation of federal law for 8 years, only to

be removed within 6 weeks of being placed in the Pack Library? Why blame the librarian for EPA violating federal law? Then again it all arcs back to 25 years ago today.

Of course looking back in hindsight, (b) (6) thought since he had turned it over to the Bunc. Co. Health Department and a state hazardous waste official, he trusted it would be followed up on by the officials and IT NEVER WAS.

Why would Wendel treat the history in her reports like this? Perhaps it has to do with her response in 1999 (NINE YEARS LATER). Then again why would Wendel treat the documents in that NPL Summary Scoring Report in a manner that appears to be the epitome of violating 42 USC 9603 Section D subsection 2, that explains that altering documents, withholding documents, tampering with documents carries a 3 year prison term for the first offense and 5 year terms for every subsequent offense. Again, you will come to know why in 2011 and 2012 behaviors like hers would be consistent with behaviors of Fred Stroud, Don Rigger and Wendel in 1999 through present day and why Franklin Hill would be issuing "a clean bill of health for the Southside Village residents" whose property was developed into a $30,000,000.00 gated community. Once again, Hill hides behind and has Ms. Miller repeating statements that sound really good to the untrained ear.... based on the data we have, it is determined to be safe." The problem is with statements like that is there is a deficit of data to draw that conclusion. However, this is part of the behavior at EPA Region 4 as Mr. Ball eloquently once stated... "All I know is I am going to back my colleagues." Of course I asked Mr. Ball on that snowy February 2010, when he was installing a Superfund Cleanup Site that can't be readily seen from the road, "would you back your colleagues even if they were wrong" and his position did not change. Ergo, we have been subjected for decades to USEPA officials who put loyalty to friendships above the mission of the EPA itself.

25 years ago:

The root of the warning: Groundwater Contamination

The Source of the concern: CTS of Asheville

The Description in language that typically generates a rapid response: Imminent Hazard

Keep in mind what had transpired In 1985 the state was asked to do a Site Assessment by EPA Region 4. EPA did not bother to check on the quality of the state's work under Mark Durway because Durway never left Raleigh and took the work of the Hazardous Waste Coordinator, Norman Lewis, that no one lived within 1,500 ft of the CTS 57 acre site (his mother lived across the street and the (b) (6) were next door) and everyone was on city water (397 wells within 3 miles and 317 wells another mile out in radius). Durway gave the CTS site a "low priority" without ever even seeing it first-hand.

In 1989, EPA conducted an FIT SSI Phase I Reconnaissance Investigation and concluded, based on the well users and population within 1 mile of the CTS site, that the site should be treated as a "high priority." Perhaps the Law Environmental private environmental screening played a role in the High Priority recommendation because TCE was found in every single soil sample taken with a high of 53,000 ppb in the soil for TCE.

So, in the fall of 1989 EPA Region 4 set a target date of June 1990 to perform the FIT SSI Phase II Sampling Investigation.

Here we are 25 years later from this document, but what justification could there possibly be for not follow up on the 1300-6 complaint form with clearly articulated concerns over the next door neighbor to a high priority site was being exposed to contamination in their water supply via their spring water well.

I hope the severity of this sets in and that those in positions to effect human health and the environment will decide to err on following EPA guidance, following federal law and adhering to the golden rule.

I imagine none of you would accept Mr. Hill's excuses or the abusive nature of almost every single official from the state and from EPA Region 4, as well as USEPA HQ.

Put yourself in the shoes of the victims and contemplate how you would feel if it were your family or your friends being treated like this and then make the necessary adjustments to atone for it.

And to think that there has been two completed IG Programs and Evaluations Investigations costing the tax-payers $502,938.00 and there is a3rd underway with the constraint of only looking at January 2012 forward must challenge the conscience of those who joined up to do the right thing. All though, if Wendel's work is not front and center in that investigation then I assume most would understand the point of the IG's work. Obviously, this would also fall under the IG CID investigation that has been ongoing since the first week of May 2010. The CID side has been one of great concern because the primary players from Region 4 were not even interviewed and the focus was on who had seen the documents versus what was in the documents and the treatment of the documents and the violations of federal law with the documents.

What would any rational person conclude from all of this... I just can't imagine what it must feel like to look the other way as so many of the peers from the other EPA regions refer to Region 4: "they are the look the other way region."

The amount of sites that go into Region 4's Site Re-use Program does not equate to successfully fulfilling the mission and mandate of the USEPA.

I realize that this is a dense email with incredibly specific details. I know that it exceeds 10,000 words and that I am asking much of each of you in requesting you read it.

Please forgive any typos or grammar issues as I am trying to get this out today. The files I have referenced are available online.

Please read it in segments as time permits. We want this to be recorded. This is about justice, environmental justice, for those who have died, those who have been sickened

and continue to suffer and their family members. This also goes out in honor of those who saw their property values decline sharply and to those who fight for justice...
It is about the rule of law, those who honor it and holding those who don't accountable.

EPA's Keith Masters was warned in writing about the CTS of Asheville, Inc Site NCD003149556 on April 20, 1990, by the state's Robin Pursell. The warning (file 10802884 was provided in the previous email) was on an official 1300-6 EPA Complaint Form and referenced the potential for "Imminent Hazards" and the (b) (6) family's water supply being contaminated. It was a big deal and yet no one from the state nor EPA actually verified the safety or lack thereof for this family. That failure to check on the family is the definition of negligence and perhaps this explains Jennifer Wendel's revisionism in the following text provided in the final NPL Scoring Summary Report from March 2012, which fits in the OIG P&E timeframe for Investigations. Remember Franklin Hill was trying to leave after meeting with Representative Meadows, (b) (6), Dr. Jeff Wilcox, Ms. Urquhart-Foster, Ms. Miller and others assembled in Hendersonville. Here is the clip when Franklin Hill gave his now infamously incredulous remark made on August 21, 2013- *"I 'll say this Mike (Reporter Mike Mason WLOS News 13), there was no negligence from anyone in Buncombe County (regarding the 1990 sampling time-frame that followed the warning from Pursell to Masters)* You can check it out for yourself at the 7:20 mark of this clip from WLOS News 13 Special Investigative
Report: https://www.youtube.com/watch?v=yfYfxK_Tl_Q
I think most everyone will find this truly spectacular: Franklin Hill offers an apology (the first time anyone from EPA had even acknowledged trespassing onto the (b) (6) property taking samples without the family's consent, which they would have gratefully given, and without every telling the family of the results... Pay attention to the apology itself. It is only because Franklin Hill hears that is what (b) (6) wants and it is not because he truly feels remorse for the damage EPA Region 4 allowed to continue unabated... At the end of the clip with Ms. Urquhart-Foster and Ms. Miller trying to shuffle Mr. Hill away before he can say any thing else to damage his credibility and the agency's. Check out mark 8:25 and When Franklin Hill explains inexplicably that there was *"no negligence on the part of anyone here in Buncombe County."*

{More later on Franklin Hill's simplification as to how contractors ended up on property that was not part of CTS and did not know it}

Below is from Wendel's NPL Scoring Final Report for CTS. It is the reference for Pursell's submission to Keith Masters. See page 9 in file 10844340:

20. R. Pinsell. Record of Communication to Keith Masters. Subject: CTS of Asheville-Complaint. EPA Form 1300-6. August 18, 2010. 2 pages.

Below is from Wendel's NPL Scoring Final Report for CTS and it is located on page 18 of the report. Think of the consequences of

On April 20, 1990, EP A documented a phone conversation with a resident regarding the "chemical pond" on the property (Ref 20, p. 2). The "chemical pond" was a reference to the 10,000-gallon pit used to hold water from de-watering sludge removed during the pre-treatment of wastes generated by operations at the company (Ref 20, pp. 1, 2).

I would say that by referencing page 2, Ms. Wendel was well aware that (b) (6) was concerned about an "old chemical pond" which was on page 1 AND was concerned for the health of the (b) (6) families living next door and downhill from CTS on page 2. I would say that (b) (6) concerns registered with (b) (6) as she stated after giving the indication that she talked with NC CERCLA official Grover Nicholson, who informed her there was a State Inspection (SI) in 1985 and an EPA FIT SSI Phase II performed in 1989. (b) (6) stated:

"He (Nicholson) is checking w/ EPA and their own files to determine the status of the facility and to determine if more action is needed based on new information. I

emphasized that this facility may have imminent hazards based on (b) (6) indication that a neighbor's new well may be contaminated."

Wonder why Ms. Wendel failed to include the real issue with file 10802884 and (b) (6) (b) (6) intent to make sure the neighbors of CTS were safeguarded AND that CTS likely had imminent hazards in both Wendel's first draft of the NPL Scoring Report, file 10799517 from March 2011 and the Final Version of the NPL Scoring Report from March 2012?

Wonder if she omitted this aspect to protect or shield EPA Region 4 and wonder if the reason we never actually saw this file was not until 2013 buried in the 62,922 pages of 494 files that were first released and then demanded by EPA Region 4 to be returned?

Consider how this changes the tenor of Franklin Hill's exchange with reporter Mike Mason on August 21, 2013. These files for the NPL Scoring would have been available to Franklin Hill.

Mr. Hill surely he would have remembered the fact that we had brought up repeatedly to Hill and others at Region 4 HQ and USEPA HQ that the state had warned EPA and its contractor that the (b) (6) were having health issues that coincided with the installation of a new spring well and that their well was contaminated. That was June 18, 1990, the two page letter was from NCDENR Superfund Section Chief Pat DeRosa and it was one week before EPA and NUS was sampling the CTS of Asheville Inc site and finding the contamination to be migrating into the (b) (6) property on one side and into the area of the CTS property that would be developed into a gated multi-million dollar community.

The question for Mr. Hill is whether he stands by his statement that in June 1990, the contractor did not know where he was and end ended up on the wrong property?

Mr. Hill failed to disclose to Mike Mason that EPA would have been with that contractor who was sampling on the (b) (6) property and that the contractor would not be pulling samples unless in the presence of EPA.

Being on the wrong property and not knowing, if that were actually the case, and it is not, would be the very definition of negligence.

Maybe in April and June 1990 the state was satisfied it had done what was needed and required by contacting EPA (twice) about the (b) (6) being impacted by CTS.

Maybe the county felt had done what was required in pushing the concerns that (b) (6) first brought to the Health Department to the state, which relayed the concerns to EPA on April 20, 1990, AND June 18, 1990, as it was an EPA RCRA site.

(b) (6) had done his part, trusted P(b) (6) to do her part, who trusted EPA to do its part and just for good measure Pat DeRosa does her part to warn EPA one more time on June 18, 1990..... and the part EPA Region 4 did is what has impacted the handling of this site for the 25 years that have followed, which includes doing nothing to stem the release and address the actual DNAPL source, etc.

So now that we are in May and 25 years after the events that unfolded, it would be only prudent to continue to tell you what the documents tell us that EPA did back then and what Wendel and others tried to do to obfuscate in order to protect the agency and their peers... which is precisely the notion that Franklin Hill has tried unsuccessfully to do.

It is interesting that in Ms. Wendel's NPL Scoring Final Version (10844340) and the draft from March 2011 (file 10799517) that a more inclusive and accurate account of what transpired is not provided in the narrative.

Why would Wendel create such a report? She did not fully represent the content or context of the April 20, 1990, warning.

What about the fact that the May 31, 1990, sampling plan is provided in her narrative and it is WRONG in the way that the plan was characterized?

What about the fact that the acceptance of the 5-31-90, plan from NUS to sample at CTS is not reflected from June 8, 1990? It is part of the 1998 FOIA to the developers

Wendel did reference the 6 page letter to the developers regarding what would be taking place during the time-frame that the Access Agreement covered****

*****THIS IS THE INCREDIBLE PART OF THE FILES: HERE IS WHAT WAS PLANNED AND HERE IS WHAT WAS APPROVED*****

(June 8, 1990)

Dear Mr. Greenburg:

The United States Environmental Protection Agency (EPA), pursuant to the authority and requirements of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980

(CERCLA), 42 U.S.C. 9601 et seq., as amended by the Superfund Amendments and Reauthorization Act (SARA), Public Law 99-499, is planning to conduct an investigation of the above referenced site. CTS of Asheville, Incorporated located on Mills Gap Road, Skyland North Carolina. EPA has reason to believe that there may be a release or threat of a release of hazardous substances from the site into the surrounding environment. The

purpose of this investigation is to determine the nature and extent of contamination at the site and to determine what, if any, further response action would be appropriate-

As per your telephone conversation on May 29, 1990 with Joan Dupont, NUS Corporation, EPA was granted permission for access to your property beginning on or about **June 25, 1990**, and continuing through the completion of the investigation on or about **June 29, 1990**. Activities to be conducted during the investigation include:

1. Inspect, sketch, and photograph the premises;
2. Collect surface and subsurface soil samples;
3. Collect groundwater and subsurface water samples;
4. Collect sediment samples;
5. Conduct air monitoring;

6. Transportation of equipment onto and about the site as necessary to accomplish the activities above, including trucks and sampling equipment.

All these activities were slated and approved from EPA and the duration was for 5 days- June 25th-29th, 1990. This makes sense because the warnings on 4-20-1990 from

Pursell dealt with the potential water supply contamination and since it was a plant that generated TCE and other VOC's had the potential to contaminate the air. SEEMS APPROPRIATE and IT WAS APPROPRIATE, RIGHT?

SO WHY DOES WENDEL APPEAR TO HAVE CONCEALED THE SAME FACTS THAT FRANKLIN HILL, DON RIGGER, and OTHERS HAVE?

What would it mean if Wendel, Rigger, Stroud, Hill, Campbell, Webster, Andrews, Tanner, Dorian, Ball, Miller, Urquhart-Foster, Bornholm and others knew what we are informing every one of?

AND once you read this you will know that Franklin Hill could not have been more TRUTHFUL when he said there was no negligence from anyone here in Buncombe County.

THE SAMPLING ACTIVITIES WERE APPROVED ON JUNE 13, 1990.

THE FILE SHOWING APPROVAL FOR THE MAY 31, 1990, FIT SSI PHASE II PLAN WERE PART OF THE 1998 FOIA SENT TO THE DEVELOPERS AND ARE PART OF THE FOIA RESPONSE IN 2013 SENT TO MIKE MASON.

THE FILE FOR THE SAMPLING PLAN SUBMITTED ON 5-31-90 IS 10802887 AND IT'S ONLY 14 PAGES LONG. WONDER WHY IT WAS NEVER PART OF THE ADMINISTRATIVE RECORD?

>>>>>> THOSE SAMPLING ACTIVITIES THAT WERE APPROVED DID NOT TAKE PLACE<<<<<<
>>>>>> THE GROUNDWATER MONITORING WELL SAMPLES SET FOR THE 53.54 ACRE SITE WERE SCRUBBED <<<<<< (see pages 9-10 file 10802887)

THE DESIGNATIONS FOR THE TEST WELLS WERE CA-TW-01, CA-TW-02, CA-TW-03, CA-TW-04 AND ALL WERE LOCATED ON THE 53.54 ACRE SITE.

TWO MONITORING WELLS WERE INSIDE THE FENCED PORTION OF THE SITE.

RIGGER ENDED UP MAKING THE ENTIRE SITE LESS THAN 10 ACRES WITH HIS CHANGES TO THE CERCLA SITE IN 2003 DESCRIPTION IN HIS DRAFT FOR THE 2004 ADMINISTRATIVE ORDER ON CONSENT.

TWO MONITORING WELLS WERE APPROVED IN THE AREA THAT BECAME SOUTHSIDE VILLAGE BUILT ON THE OTHER 44.89 ACRES.

>>>>>> WHY WERE THESE APPROVED WELLS NOT INSTALLED AND SAMPLES NOT PULLED IF THE BASIS OF PURSELL'S WARNING DEALT WITH GROUNDWATER? <<<<<<

>>>>>> THE MAY 31, 1990 SAMPLING PLAN WAS APPROVED ON JUNE 13, 1990, BUT WENDEL DOES NOT INCLUDE THIS IN HERE DRAFT OR FINAL VERSION FOR HER NPL, WHY NOT? <<<<<<

Key facets of the timeline:

April 12, 1990: EPA submits Site Information and Access Information Sheets
April 18, 1990: Robin Pursell of the Hazardous Waste Section for NC receives a telecon report from (b) (6) concerning an "old chemical pond" AND the (b) (6) water supply may be contaminated by CTS.
April 20, 1990: Pursell submits EPA Complaint Form 1300-6 describes the information from (b) (6) and the potential for imminent hazards at the CTS site

May 31, 1990: NUS submits a 14 page sampling plan- 4 groundwater monitoring wells, 4 surface soil samples, 4 subsurface soil samples, 4 sediment samples and 1 private well sample (set for the nearest private well)

All sampling points and types were to set to determine the presence or absence of contamination...

June 8, 1990: EPA sends Mills Gap Road Associates the planned activities set for June 25-29, 1990.

June 8, 1990: EPA memo shows the May 31, 1990 sampling plan is 1 of 4 FIT SSI Phase II investigation plans under review (NOT IN WENDEL'S NPL REPORT)

June 13, 1990: EPA memo shows the May 31, 1990 sampling plan is approved (NOT IN WENDEL'S NPL REPORT) for June 25-29, 1990

WHAT HAPPENED ON JUNE 18, 1990, JUST 5 DAYS AFTER THE APPROVAL THAT DOES NOT SHOW UP IN WENDEL'S NPL REPORT AND JUST 7 DAYS BEFORE THE SAMPLING UNDER THE FIT SSI PHASE II?

>>>>> JUNE 18, 1990: NCDENR Superfund Section Chief Pat DeRosa send EPA and NUS, the contractor, a two page letter. Please recognize the significance of this passage <<<<<

"Ms. Purcell (sp) received a phone call from (b) (6), Ogren Industries (b) (6) about CTS. (b) (6) lives in the area. (b) (6) was concerned about an old "chemical pond" which used to be at the CTS property. He said that the property was about to be sold or had just been sold and he was concerned that the contaminated areas on site might not be cleaned up. He also said that a well had recently been installed on the adjacent residential property. This property is owned by (b) (6) (no phone number, works for the Buncombe County Social Security Commission). (b) (6) said that after the well was put into use the owners began having health problems. He said the well was contaminated."

>>>>>> MS. Wendel, why is this letter from NCDNER's SUPERFUND SECTION NOT MENTIONED IN ANY EPA DOCUMENTS? WHY DOES THIS NOT PART OF YOUR NPL SCORING DRAFT OR FINAL REPORT? <<<<<

Unlike the 4-20-90 1300-6 EPA complain form, the (b) (6) were named as the adjacent property owners, it is stated again that their water supply may be contaminated and it was stated that THEY BEGAN HAVING HEALTH PROBLEMS AFTER A NEW WELL WAS INSTALLED!

Was that negligence, Mr. Hill? Was it negligent to never follow up with the family that EPA has now been warned twice over and the warnings come before EPA and NUS were sampling?

Why did no one from EPA or NUS check on this family?

Could It Be Any Worse For EPA?

Maybe EPA Thought It Would Get To Determine The Threat Based On The Sampling That Would Take Place A Week Later... But No One Checks The Actual Water Supply?

But Why Did No One Check On That Family? Isn't that NEGLIGENT?

WHAT COULD BE WORSE THAN THIS REALITY and WHAT REALITY HAS EPA SOUGHT TO CONCEAL?

It is critical to note that most of theses key details were all part of a 346 page file that was created on 2/25/91 when the CTS site was archived and declared inactive. There would be no more added to this file and it was sent as a FOIA request to the Mills Gap Road Associates on June 10, 1998, a little more than a year before CTS was once again documented to be releasing toxic waste and this time is was the state doing the investigation starting on July 9, 1999. It was nine years earlier that EPA knew the release was occurring in two separate directions, one into the (b) (6) property and their water supply and the other into what would be turned into the upscale Sousthside

Village gated community built on part of the CTS CERCLA site, which began in 1998. And to think a $30,000,000.00 development is on a CERCLA Superfund site that Mr. Hill desperately wants to convince himself and others is not the case.

Wonder why it is that in the 346 page file was stated to be the complete CTS file, when it was provided in 1998 to MGRA, the April 20, 1990, 1300-6 complaint form from Pursell is missing in the FOIA from 1998 and is missing from the digital version in file 10841568 from 2-25-1991?

Wonder why the Field Logbook notes are missing from the FIT SSI Phase II Final Report in both the 1998 FOIA version and the digital version?

Please absorb the excerpt from Wendel's NPL Scoring Report the following timeline she advances:

In August of 1989, the NUS Corporation (NUS), EPA Region IV Field Investigation Team (FIT), completed a Screening Site Inspection (SSI), Phase I, at the CTS facility (Ref 13, p. 1). Phase I of the inspection included a review of state and EP A file material, a target survey, and an offsite reconnaissance of the facility and surrounding area (Ref. 13, p. 1). Based on targets and NUS's findings, an SSI, Phase II, was recommended for CTS (Ref 13, p. 3).

On April 20, 1990, EP A documented a phone conversation with a resident regarding the "chemical pond" on the property (Ref 20, p. 2). The "chemical pond" was a reference to the 10,000-gallon pit used to hold water from de-watering sludge removed during the pre-treatment of wastes generated by operations at the company (Ref 20, pp. 1, 2).

On June 25 through June 26, 1990, NUS conducted the SSI, Phase II at the property (Refs. 21, pp. 1, 7; 22, p. 1). The Study Plan for the SSI was submitted on May 31, 1990 (Ref 23, p. 1). Eighteen environmental samples, including six surface soil, four subsurface soil, five sediments, two surface water samples, and one private well

sample were collected during the field investigation (Ref 21, pp. 15-16). The Final SSI, Phase II, Report, issued February 21, 1991, stated that several organic and inorganic substances were detected in soil, sediment, and surface water samples (Ref 21, p. 6). Vinyl chloride, TCE, and 1,2-dichloroethene (1,2-DCE) were detected at concentrations of 47micrograms per kilogram (ug-kg), 50 ug/kg and 330 ug/kg, respectively, in a surface water sample (Ref 21, pp. 27, 33). Vinyl chloride (84 [ug/kg) and 1,2- DCE (29 to 1,100 ug/kg) were detected in sediment samples (Ref 21, pp. 29, 33, 110). Based on the analysis of possible migration pathways, the results of the sampling investigation, and the information obtained from the file material, NUS recommended no further remedial action for CTS (Ref 21, p. 6).

In July 1999, the North Carolina Department of Environment and Natural Resources (NCDENR), Division of Water ..... {LOOK FOR THE REST OF THIS SECTION PROVIDED BELOW}

{THERE IS A GAP FROM THE 1991 FIT SSI PHASE II FINAL REPORT and EVENTS IN 1999}

Why is Matthew Robbin's Brownfield Memo not part of Wendel's NPL Final Report when it stated that the CTS of Asheville, Inc CERCLA Site NCD003149556 had been deleted from the CERCLIS Inventory}

Ms. Wendel, why do you provide pages for the DCE found for 1,100 ug/kg in the narrative and yet the page with data for the DCE 1,100 ug/kg is MISSING?

Why is it that the 196 page final report in file 10802885 is missing dozens of pages, including 2 of 3 appendices, while hand numbered to 196 pages?

How is that possible Ms. Wendel to be missing 2 of 3 appendices and yet there are 196 pages?

The only way to make it possible is to make copies of the data sheets in Appendix B and interlace them to make up for the pulled pages. And considering this fact, the VOC data sheet for CA-SD-02 is also MISSING.

Why is it that the Administrative Record version for the FIT SSI Phase II Final Report is missing 165 pages and was assigned the file number 35185?

Ms. Wendel, why did you create the file number 10802885 for the FIT SSI Phase II Report when the file for the same FIT SSI Phase II Report in the Administrative Record (missing 165 pages) was 35185?

Ms. Wendel, why create those numbers to begin with when the original SISB file number was 10519699? One file with three different file numbers. Negligent?

At a certain point the sum of all this makes it abundantly and redundantly clear as to what the actions have been to conceal the response to this disaster in 1990 and in 1999, which was all about hiding what Franklin Hill says was not negligent...

Mr. Hill is correct, if something is done with intent, then it is no longer in the realm of possibility to be negligent.

Ms. Wendel, here is what you put down as being in the May 31, 1990, FIT SSI Phase II sampling plan: ***Eighteen environmental samples, including six surface soil, four subsurface soil, five sediments, two surface water samples, and one private well sample were collected during the field investigation.***

Why did Wendel do this? 18 samples?

The May 31, 1990, sampling plan that was approved had 4 surface soil samples, 4 subsurface soil samples, 4 sediment samples, 4 groundwater samples and 1 private well sample (which ended up being 4,226 feet away from CTS versus next door to CTS)... Count them up and it EQUALS 17 samples NOT 18 samples.

Ms. Wendel, why did you write that the May 31, 1990, plan had two surface water samples when it did not mention surface water in the actual approved plan?

Ms. Wendel, why did you write there were 6 surface soil samples when it was 4?

Ms. Wendel, why did you write that were 5 sediment samples when it was 4?

The sampling you write about was not approved!

And what about those sediment samples are problematic? ~~~~~~~~~~CA-SD-02 and CA-SD-03 were first two samples taken after the background sample, and they were taken at the end of CTS's drainage pipes~~~~~~~

EPA knew that CTS had 2 drainage pipes running toxic waste: 1 into the very property that the state had warned EPA twice over and one into a 100,000 gallon unlined containment pons with a gate valve to release the waste into Dingle Creek to run it to the French Broad. EPA and NUS would have seen the wooden bridge constructed to get to that gate valve to protect those asked to release the contamination. This happened to be the area that became a $30,000,000.00 gated community.

About CA-SD-02's location Ms. Wendel, wasn't it originally located in the heart of the 53.54 acre CTS site, outside the fenced portion and where there are $400,000.00 homes where CTS's water reservoir was located?

Mr. Hill, how does CA-SD-02 end up being taken 800 feet away and on private property without the (b) (6)s ever being informed? The approved plan was signed off on 6-13-90, the second warning from the state is sent on 6-18-90 (WHICH EPA HAS FAILED TO DISCLOSE) and on 6-26-90 at 9:30am EPA entered private property without an access agreement, sampled and

never informed the residents despite the written warning regarding their health problems.

HAVE A LOOK AT PAGE 10 OF ANY VERSION OF THE FINAL FIT SSI REPORT AND SEE THE MAP OF WHAT WHERE CA-SD-02 IS-

YOU CAN PICK VERSION 35185, 10802885, 10519699, OR YOU CAN LOOK IN THE 346 PAGE FILE FROM 2-25-91 THAT WENT TO THE DEVELOPERS ON JUNE 10, 1998. COMPARE THE MAP OF WHAT WAS DONE VERSUS THE MAP ON PAGE 10 AND WHAT WAS APPROVED TO BE DONE AND THAT IS FROM FILE 10802887.

Mr. Hill, you are correct there was no negligence because it was done by design, which makes it criminal in the eyes of those that have seen this....

EPA DID NOT follow protocol for accessing the (b) (6) property but did follow the proper protocol when EPA sampled the (b) (6) well at (b) (6) (b) (6)e (4,226 ft from CTS). EPA had an Access Agreement and EPA provided the residents the results of the sampling albeit in December 1990.

Why did the (b) (6) not receive the same treatment in keeping with what is required by EPA itself?

If EPA obtained a sample by removing sediment off the (b) (6) property, then EPA was in violation of the 4th Amendment that protects against illegal search and seizure. Although the (b) (6)s would have welcomed the sampling and granted even more access, they did not know better, which is the theme that runs through the current of abuse. They were never told of the sampling, they were never informed of the results and EPA never acknowledged this until Franklin Hill "apologized" for it on 8-21-13.

AN APOLOGY IS NOT SUFFICIENT TO ATONE FOR THIS CALAMITOUS FAILURE.

THE (b) (6) WOULD BE DRINKING THE WATER FOR ANOTHER NINE YEARS.

IN 1999 WHEN DNENR's DIVISION OF WATER QUALITY TESTS THE (b) (6) WATER IT IS 7,000 TIMES THE STATE LIMIT FOR TCE AND THE (b) (6) WELL WHICH WAS LISTED AS 1,200 FT FROM CTS WAS TESTED IT WAS CONTAMINATED AT 90 TIMES THE STATE LIMIT.

Why was the (b) (6) well feeding 2 homes not tested in 1990 at a distance of 1,200 feet from CTS versus the one that was tested 4,226 feet away.

What happened in April of 1999, Mr. Hill and Ms. Wendel? (b) (6) was diagnosed with an inoperable brain tumor? Could that have been prevented had the right thing been done in 1990 by EPA?

What happened in November of 1999, Mr. Hill and Ms. Wendel? (b) (6) was diagnosed with two inoperable optical nerve tumors? Could that have been prevented had the right thing been done in 1990 by EPA?

What happened in 2007, Mr. Hill and Ms. Wendel? (b) (6) was died from pancreatic, liver and colon cancer? Could that have been prevented had the right thing been done in 1990 by EPA?

Makes for a very compelling liability question doesn't it? Especially if there was no negligence from anyone in Buncombe County in 1990...

Remember this aspect of Ms. Pursell's 1300-6 complaint form dated 4-20-90?

"He (Nicholson) is checking w/ EPA and their own files to determine the status of the facility and to determine if more action is needed based on new information. I emphasized that this facility may have imminent hazards based on (b) (6) indication that a neighbor's new well may be contaminated."

Very strange that Ms. Wendel left the most significant part out regarding the (b) (6) water supply (possibly) being contaminated considering that EPA ended documenting the contamination to be migrating in multiple directions and three different media: surface water, sediment and soil via an unauthorized sampling plan.

Consider his aspect from the history of the CTS story has never been acknowledge by EPA from DNER's Superfund Section Chief that was the second written warning on 6-18-90 :

"...***This property is owned by (b) (6) (no phone number, works for the Buncombe County Social Security Commission). (b) (6) said that after the well was put into use the owners began having health problems. He said the well was contaminated."***

There is a reason that James Bateson from NCDENR said that the memo that DeRosa sent EPA and NUS on June 18, 1990, was the biggest mistake DENR ever made... and now you know why?

Now you know what was done after it was sent and the changes that were made to an authorized sampling plan that was in OPPOSITION to the warnings themselves...

What about the groundwater though that was the point of DeRosa's warning relative to the (b) (6) health problems from a new well in 1990?

Nine years later the state's agency actually responded to an (b) (6)-like warning from Bob Taylor and the contamination was determined to be in the exact same spot on July

9, 1999, that EPA found on June 26, 1990. More confounding is that unlike EPA Region 4, the state determines that (b) (6) water supply may be threatened and they actually test it on July 12, 1999, and it comes in at 7,000 times the state limit from TCE.

Why does Ms. Wendel treat the history that EPA documents show is counter how she reflects it?

Why such a difference in versions?

Seriously, isn't overwhelmingly obvious that it is part of their attempts to shield themselves and by default the actual contaminator?

Please consider that even though Ms. Wendel does not show up against EPA payroll for hours worked at CTS until 2008, she was in on this from August 16, 1999, when she received the state's 46 page request for an Emergency Response and Removal Investigation... I can only surmise why Wendel, Stroud and Rigger are not showing up on the books for hours worked at this site.

Rigger, Wendel and Stroud worked the site in 1999 and Rigger and Wendel were one on only three EPA Region 4 officials to receive the entire state request for an Emergency Response and the attachments that clearly demonstrated that CTS was the source of the contamination that EPA's own records from nine years earlier had already demonstrated. (the difference in 1990 is the site was 53.54 acres and in 1997 the site was illegally sold in violation of NC statute and in 1998 Southside Village was being built on a toxic CERCLA Superfund site)

However, with this type of intimate knowledge, which includes having the compendium of files, working the site for an Expanded Site Assessment in 2001 (again not showing against the books for that work, either) and scoring the site repeatedly and somehow never allowing it to go NPL sooner, Wendel would know the history of the site to the degree that it would be impossible to reconfigure the reality.

There is a reason that the Administrative Record was not put together for this disaster until 2007 despite being required to be available to the public in October 1999.

There is a reason the actual files in it is as follows and the files have been altered, pages withheld and constructed in opposition to 42 USC 9603 Section D subsection 2:

3049 28 pages. Guidance Documents Reference

35185 31 page version of 196 page FIT SSI Phase II Final Report 2-21-1991 ends in mid sentence, tables out of sequential order, missing the rest of the report: text, Summary, References and all 3 appendices

35186 46 pages total. 3 page NCDENR Request for an EPA Emergency Response and Removal Action with 43 page attachment documenting CTS is the source 8-16-1991. Look at the narrative that Wendel uses in her NPL Scoring Report. Look at the reference page in Wendel's NPL Scoring Report: There is no mention of this letter. Why not?

35187 3 pages. Special Pollution Report obtaining up to $200,000.00 in Response funds under a CERCLA Superfund site CREATED by STROUD and RIGGER and ASSIGNED to the (b) (6) property without the (b) (6) being notified. This seems to be a misappropriation of public funds according to the US Coast Guard National Response Center officers because there was a pre-existing CERCLA Superfund site with a viable responsible party. **WHY WOULD RIGGER AND EPA WAIVE THE COSTS SPENT UNDER THIS S.P.R. THAT ENDED UP TOTALING $108,414.84 in the 2004 Administrative Order on Consent, which was, strangely enough, not part of the Administrative Record Files? Then again, I am showing you the paltry number of files that are in it reflected here...**

10503460 1 page. This was the Introduction page for the Administrative Record. The exact text for it is below and please note the files did not go into the library until May 2007, 8 years late and 8 years after the Mills Gap Road Groundwater Contamination Site was created despite the fact that CTS of Asheville, Inc Site already existed and the file 35185 and 35186 in the Administrative Record both were directly connected to the CTS of Asheville, Inc site. 8 years was plenty of time to fix what Don Rigger regarded as a screw up when he tied to rationalize the irrational creation of the Mills Gap Road Groundwater Contamination Site on 8-23-99. In case you missed that explanation please click here to see and here it for yourself: https://www.youtube.com/watch?v=_nAvu2iTBTo Remember that those who work for EPA in this field KNOW that EPA Guidelines dictate that when an inactive site that has been archived has conditions change that require a response action, EPA must unarchive and REACTIVATE the site. EPA does not get the option to maintain two sites for the same source. EPA and Wendel with others does not get accept No Further Remedial Action Planned designations for the CTS site while doing work at the CTS site under the (b) (6) Mills Gap Road Groundwater Contamination site and finding the mother-lode under the CTS building on May 98, 2001, under the Mills Gap Road Groundwater Contamination Site.

This document contains the Index to the Administrative Record for the Mills Gap Road •Groundwater Contamination Removal Site, Asheville (Skyland), Buncombe County, North Carolina. The Administrative Record is available for public review at the EPA Region 4 office in Atlanta, Georgia and at the Asheville-Buncombe Library, Asheville, North Carolina.
Questions concerning the Administrative Record should be addressed to the EPA Region 4 On-Scene Coordinator (OSC) for the Mills Gap Road Groundwater Contamination Removal Site, Asheville (Skyland), Buncombe County, North Carolina.
The Administrative Record is required by the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) as amended by the Superfund Amendments and Reauthorization Act (SARA).

10503461 2 pages. Section I Site-Specific Documents / Administrative Record Index. Here it is in its entirety and note that there is a gap from 2.0 Removal Response to 13.0 News Clippings and Press Releases. Why is it that there are no newspaper clippings? Why is the only press release the announcement of the creation of the Administrative Record in 2007 and it availability in 2007, when both should have been done in 1999 and under the CTS of Asheville, Inc. CERCLA Superfund Site NCD003149556? Please take a look at Section 1 from 1991 and Section 2 from 1999.

Administrative Record Index for the
MILLS GAP ROAD GROUNDWATER CONTAMINATION Removal Site
NCSFN0406988
PRE-REMEDIAL
1. 9 Site Inspection Documents
1. Final Report: Screening Site Inspection, Phase II, CTS of Asheville, Inc., Skyland, Buncombe County, North Carolina. (February 22,1991)
REMOVAL RESPONSE
2.1 1.
2. 9 1.
2.
2.10 1.
2.17 1.
Correspondence
Letter (with attachments) from Pat DeRosa, NCDENR, to Myron D. Lair, EPA Region IV. Serves as a request for an immediate removal evaluation at the Mills Gap Road Groundwater Contamination Site. (August 16,1999) [Note: Due to the CONFIDENTIAL nature of the material, a portion of this document has been

withheld. Withheld material is available, for Judicial review only, in the Records Center at EPA Region IV, Atlanta, Georgia].

Action Memoranda

Emergency Action Memorandum/Special POLREP from Fred Stroud, EPA Region IV, to Region IV Regional Response Center, State Contact, and EPA-HQ. This memo documents the decision to initiate emergency removal/stabilization actions at the Mills Gap Road Groundwater Contamination Site, Asheville, Buncombe County, North Carolina. (August 23,1999) [Note: Due to the CONFIDENTIAL nature of the material, a portion of this document has been withheld. Withheld material is available, for Judicial review only, in the Records Center at EPA Region IV, Atlanta, Georgia].

Action Memorandum/Enforcement from James W. Webster, EPA Region IV to Richard D. Green, EPA Region IV. Regarding the request for and documentation approval of the proposed removal action for the Mills Gap Road Site, Asheville (Skyland), Buncombe County, North Carolina. (April 04, 2002) [Note: Due to the CONFIDENTIAL nature of the material, a portion of this document has been withheld. Withheld material is available, for Judicial review only, at EPA Region IV, Atlanta, Georgia].

Pollution Reports (POLREPs)

Cross Reference: Emergency Action Memorandum/Special POLREP from Fred Stroud, EPA Region IV, to Region IV Regional Response Center, State Contact, and EPA-HQ. This memo documents the decision to initiate emergency removal/stabilization actions at the Mills Gap Road Groundwater Contamination Site, Asheville, Buncombe County, North Carolina. (August 23,1999) [Filed and cited as entry 1 in 2.9 REMOVAL RESPONSE - Action Memoranda].

CERCLA Removal Site Records

Incident Report # 495984, National Response Center. Regarding an unknown sheen sighting. (August 23,1999)

13.0 COMMUNITY RELATIONS

13.7 News Clippings and Press Releases

1. "EPA Announces the Availability of the Administrative Record for Mills Gap Road Site in Asheville, Buncombe County, North Carolina," Asheville Citizen Times, Asheville, North Carolina. (May 06, 2007)

10503462 2 pages. Annotated Administrative Record Index. This file is the same as 10503461 only it has the new handwritten file numbers on the written sides by the files where the original versions had official file numbers with barcodes. These file were now in the Administrative Record using handwritten numbers on the copies of the originals with those barcodes and file numbers hidden. Surely, this is not standard procedure. Why do this?

Was it because the EPA was caught in 2007 with no Administrative Record and they had created a new site with the wrong address and CERCLA name and number that should never have been created and EPA knew it and knows it? Look at this way, **The real and official file number 35185 is 10519699. The real and official file number for 35186 is 10519701.**

10503463 15 pages. This is the Action Memorandum for Enforcement from April 4, 2002. Last page of the Memorandum (page 8) first paragraph it clearly states what WOULD HAPPEN AND WHAT DID HAPPEN AND WHAT IS HAPPENING BECAUSE THE DNAPL SOURCE OF CONTAMINATION FOUND ON MAY 8, 2001, UNDER THE CTS BUILDING DURING THE INVESTIGATION THAT WAS PERFORMED UNDER THE CERCLA SITE THAT WAS CREATED USING FALSIFIED REPORTS AND PUT ON THE VICTIMS' PROPERTY.... LET THIS SINK IN:

VI. EXPECTED CHANGE IN THE SITUA TION AND SITE CONDITIONS IF THE ACTION IS DELAYED OR NOT TAKEN

The situation at the site will worsen if a removal action is delayed or not taken. The presence of contaminated soil beneath the building at

the site poses a threat to the nearby population and the environment. Unless removal actions are initiated and completed the contaminants within the unsaturated zone will continue to be a source of groundwater and surface water contamination.

The levels of TCE found in the soil on 5-8-2001 in Boring Hole #3 at 32-34 ft below surface was 830,000 ppb. The highest levels of TCE in groundwater ever detected on the CTS site property was at Monitoring Well 6A at 42,000 ppb in 2009. In January 2014, the TCE in the soil in roughly the same spot as BH #3 increased to 1,120,000 ppb and the levels of TCE in the groundwater under the CTS property was 86,100 ppb.

Prediction turned to Reality

10503464 2 pages. This is the file for the falsified report submitted by Rigger and Stroud to the USCG NRC in order to generate an Incident Report to justify the creation of a New and completely UNNECESSARY Superfund Spill ID Request (check out file 10802890 for the proof of that and more on that file later). In the meantime in this 2 page file, Rigger and Stroud submit a claim that there is an *unknown sheen from an ink now source from an unknown responsible party*. Nothing could have been further from the truth. Rigger and Wendel had received a 46 page document on 8-16-99 with every single page tying CTS of Asheville, Inc. to the release. Rigger and Stroud received that 46 page document with a complete chemical breakdown of what was in the sheen, what was in the springs and what was in the (b) (6) Well.

In 1999, when this went down for EPA, the complete file for the CTS was just 346 pages and a copy was sent in a FOIA response on June 10, 1998 to the developers that bought the CTS property in 1987. Of those 346 pages, many were duplicated in an extra copy of the sampling investigation in 1990. The point is EPA was notified on 8-16-99 that CTS was still releasing what EPA knew was migrating from June 1990. EPA was summoned back to the exact spot it had trespassed on when EPA took samples nine years earlier. EPA was looking at an upscale community under construction on a major portion of one of its CERCLA Superfund sites...

Rigger and Stroud chose to use the system to protect the EPA and re-victimize our community.

This 2 page Incident Report was submitted on 8-23-99 to the USCG NRC in order to report an incident that Rigger and Stroud claimed had occurred on 8-21-99, 5 days after Rigger and Wendel knew that the incident that was reported by Bob Taylor on July 8, 1999, NCDENR sampled for on July 9, 1999, and reported by the Citizen-Times on July 10, 1999.

THIS LOOKS VERY BAD BECAUSE IT IS VERY BAD.

10503465 1 page. This file is the press release regarding the Administrative Record from May 2007. It was 8 years late in violation of 42 USC 9603 Section D subsection 2, its contents were tampered with and altered with major portions being removed but made to look complete AND it was removed from the library by David Dorian within 6 weeks of the press release... Please read the text carefully from that press release:

ATTENTION DON RIGGER: PLEASE SEE THE SIZE OF THE PROPERTY AS DESCRIBED IN 2007.

RIGGER CHANGED IT IN 2003 WITHOUT ANY BASIS TO NINE ACRES BECAUSE THE OTHER ACREAGE WAS USED TO BUILD A $30,000,000.00 GATED COMMUNITY ON A TOXIC CERCLA SUPERFUND SITE.

EPA Announces the Availability of the Administrative Record for Mills Gap Road Site in Asheville, Buncombe County, North Carolina

The United States Environmental Protection Agency (EPA) announces today that the Administrative Record for the Mills Gap Road Site in Asheville, North Carolina is available for public review.

The Administrative Record file includes documents that form the basis for selection of a removal action. A removal action is a short-term cleanup intended to stabilize a site that poses an imminent and substantial threat to human health or the environment. Documents in the record may include, but are not limited to, preliminary assessment and inspection report, test results, and the Action Memorandum. All interested persons are encouraged to review and comment on the documents.

The documents will be available for public review during normal business hours at the following locations:

Asheville-Buncombe Library

67 Haywood Street

Asheville, North Carolina 28801 Attn: Ann Wright

U.S. EPA

61 Forsyth Street, SW Atlanta, Georgia 30303 Attn: Debbie Jourdan

The Mills Gap Road Site occupies an area of approximately 57 acres and contains a large, one-story structure situated on about 10 acres of maintained grounds. High levels of chlorinated solvents were identified in two springs and one domestic well.

In 2003 Don Rigger took the title of "Acting Emergency Response and Removal Chief," a position that both Myron Lair and Shane Hitchcock both said Rigger never held. Lair had been the ERRB Chief and then Hitchcock became ERRB Chief. Rigger used this self-appointed title to write the draft version of the Administrative Order on Consent. Rigger is the one that changed the size of what

was listed in 2007 as 57 acres to NINE acres. Rigger's draft changes to the size became permanent regardless of the logic.

How could EPA let the site remain more than 50 acres as it was, is and will be despite Rigger's work?

As with the activities in 1999 in creating an alternative site placed on the victims' property with an ambiguous name not even connected to CTS, this act in 2003 to change the size cemented EPA's position. EPA could never afford for others to learn what we have been teaching about: 44.89 acres sold in spite of state statutes in 1997 were now developed into a $30,000,000.00 gated community BUILT ON A TOXIC SUPERFUND SITE.

There is a reason EPA no longer sampled on that side of the property and has NEVER sampled groundwater, even if Southside Village is on city water unlike those of us on the other side were starved for it until the fall of 2014, because the groundwater was being impacted under the plant, the plant sits on a groundwater divide and it flows in three different directions: east and west in the shallow bedrock and south to north in the deep bedrock feature.

EPA scored the site under Wendel in a manner that would allow them to work the issue inside that described as an approximately 10 acre fenced area. Everything EPA Region 4 has done tracks back to the failures to protect in 1990... the issue of negligence is irrelevant. What is relevant is what EPA systematically began doing in response to the failures in 1990...

Seriously, how did the Mills Gap Road Groundwater Contamination Site occupy an area of approximately 57 acres and contain a large, one-story structure situated on about 10 acres of maintained grounds if that description is for the

CTS of Asheville, Inc. site with the street address of 235 Mills Gap Road while the Mills Gap Road Groundwater Contamination Site was put on the (b) (6) property at (b) (6) ?

Wendell said in April 2011 at the Skyland Fire Department Community Meeting, which was the last one held until the summer of 2014, that this type of thing of having two names for the same site with two different street addresses and in opposition to preexisting records "happens all the time."

Wendel claimed EPA had always treated the CTS of Asheville, Inc. Site NCD003149556 and the Mills Gap Road Groundwater Contamination Site NCSFN0406988 as if they were one and the same while keeping them separate... This is on videotape! This is not how EPA is required to act.

The reason Wendel gave: Every year Wendel claimed EPA sent CTS a bill and to put the sites together as one under the CTS of Asheville, Inc. site would have been a "nightmare."

As of March 25, 2013, CTS had paid to EPA a grand total of $70,211.33- THAT WAS THE TOTAL AMOUNT TO THAT DATE. Rigger and EPA had waived $108,414.84 in response costs for CTS... At any rate, Wendel and EPA don't have the luxury of maintaining two or more sites for the same source of contamination. PERIOD.

Wendel is the one that said she put a lot of the responsibility on the (b) (6) because they should have moved. This was on July 10, 2008, at the Skyland Fire Department.

How many of you would actually believe that statement that we have on video tape?

On February 27, 2007, EPA's Debbie Jourdan sent a letter to Ann Wright of the Pack Library alerting her to expect an Administrative Record for the Mills Gap Road Groundwater Contamination Site. the Administrative Record should have been in the library dating back to October 1999. It arrived May 10, 2007.

WHY WAS THERE A DELAY FROM 2-27-07 UNTIL 5-10-07?

WHAT WOULD POSSIBLY CAUSE THAT DELAY?

JUST AS VALID, WHY WAS THERE NO ADMINISTRATIVE RECORD FROM 1999 AVAILABLE AS REQUIRED BY FEDERAL LAW?

HOW COULD THE FILES THAT COMPRISE THE ADMINISTRATIVE RECORD BE LIMITED TO JUST THESE IN TERMS OF SITE-SPECIFIC FILES AND WHY WERE THEY ALTERED AND MISSING MAJOR PIECES OF THE 1991 FIT SSI PHASE II REPORT?
JUST THESE FILES: 35185, 35186, 35187, 10503460, 10503463, 10503464 AND 10503465

Do you think the following might explain why there was a sudden move out of Atlanta to become compliant with federal law after being in violation for almost 8 years?

During the early part of the 2007, the odors on the (b) (6) property were a growing concern and likely a menace. (b) (6) decided to act in order to determine what was going on, while EPA was essentially absent. (b) (6) and her family sharing the property with three separate homes had NO IDEA that whenever they were home, they were standing on property that EPA had turned into a CERCLA site, which shielded EPA and by default the contaminator. On February 15, 2007, at 12 noon, a surface water sample was taken from the spring water reservoir. Imagine if (b) (6) had not reported his concerns over the dead and dying vegetation in the spring area on July 8, 1999. The (b) (6) would have gone on being exposed to incomprehensible levels of TCE as well as the benzene spectrum being present. This was about 7 years and 7 months after the (b) (6) water supply had been tested by NCDENR DWQ and the levels were 21,000 ppb for TCE- SEVEN THOUSAND TIMES THE STATE LIMIT. Let's not forget the last sentence on the last page of the Action Memorandum For Enforcement from 4-4-02... *conditions at the site will worsen if a removal action is not taken AND completed...*

The sample pulled on 2-15-07 revealed that conditions originating at the CTS property releasing toxic contamination into the (b) (6) property had worsened indeed:

TCE = 293,000 ppb

TCE = TWO HUNDRED NINETY THREE THOUSAND

293,000 PPB FOR TCE = 97,666.66666666666667

TIMES OVER THE STATE LIMIT

TWO HUNDRED NINETY THREE THOUSAND PPB FOR TCE

=

13.95 TIMES WHAT WAS DISCOVERED IN 1999 BY NCDENR DWQ FOR TCE AT THE RICES

Put yourself in (b) (6) shoes... here they are on their own property, they have no idea the EPA and CTS have consummated a self-insulating Administrative Order on Consent, which neither had the rights to and both violated the (b) (6) 14th Amendment Rights to enter because they both had usurped ownership of the (b) (6) real property...

What would levels like these mean if CTS had not settled with any one from South Asheville?

What levels like this mean to EPA if 21,000 ppb triggered the activities in 1999 by the EPA and the state?

What would this mean for EPA if the source of contamination in its highest concentration on May 8, 2001, and NOTHING HAD BEEN DONE TO REMOVE IT BY 2007?

What **does** this mean for EPA since it is 2015 AND NOTHING HAS BEEN DONE TO REMOVE THE DNAPL SOURCE?

Back to February 2007... When the samples on the (b) (6) property were pulled on 2-15-07, there was no Administrative Record!

When (b) (6) was informed of the levels in the contamination, she called CTS's contractor MACTEC (now AMEC) and Susan Kelly. What was Susan Kelly's response? The terms of the Administrative Order on Consent from 2004, states that CTS and its contractors will report any levels that hit the RQ amount, meaning Susan Kelly was required to file a report because 293,000 was a Reportable Quantity.

Why is it that there is no evidence that a report was recorded in the files and monthly updates?

Why did no one from MACTEC (AMEC) not follow up on this event?

What would levels like that do for CTS's liability?

CTS and MACTEC (AMEC) IGNORED THE 293,000 PPB FOR TCE AS FAR AS DOT RICE KNEW....

HOWEVER, DOT DID TRY CONTACT THE EMERGENCY ON-SCENE COORDINATOR, TERRY TANNER...

Dot wrote extemporaneous notes for the short phone call she finally had with Tanner. She told him the levels were 293,000 ppb for TCE.

Tanner told her it was nothing to worry about if the water was moving and no one touched it.

293,000 ppb for TCE and its a non-event?

No follow up ever took place with (b) (6) or our community. It was not part of the record and EPA failed to follow its own protocol to investigate levels like these that were unmatched in the US at that time. However, it does create an issue if EPA is thinking about a Brownfield for the CTS property. It does create issues if EPA has not adhered to federal law by having an Administrative Record assembled and available to the public as well as being in the public library.

The sample was taken 2-15-2007, the sampling analysis data sheets show the samples were run on 2-20-2007 and a week later EPA is alerting the library that the

Administrative Record is being sent to the Pack Library and it does not arrive until May 10, 2007...

What happened in the interim?

EPA had to construct the Administrative Record and did so with the least amount of information possible...

It was 2007 and the most recent document was the 2002 Action Memorandum for Enforcement?

By the time that Administrative Record arrived, (b) (6) was now checking into the situation on behalf of (b) (6) e whose sister and brother-in-law had throat and sinus cancer living downgradient from CTS on Concord Road. Concord Road was where the (b) (6) and it was their well that was found to be contaminated in 1999. It was in 2007 that (b) (6) died from cancer.

By the time the Administrative Record arrived at the Pack Library about 8 years over due in violation of federal law, Rebecca Bowe was writing an expose about the CTS disaster for the Mountain Xpress called Fail-Safe.
(http://mountainx.com/news/community-news/071107waste/ } and it was Rebecca Bowe who pulled samples further down the Southside Village side of the CTS property toward Sweeten Creek Road and the TCE levels were so high that the exceeded the analytical machine's calibration which was set at a max of around 700 ppb.

Once again, no one from EPA followed up on this as an RQ. Why is that?

One thing is for certain, once questions began to be raised about the horrendously handled toxic disaster site, that Administrative Record was pulled by Terry Tanner's successor, David Dorian, who was the 6 of 9 Emergency On Scene Coordinators. Dorian made his claims that blamed the librarian for asking that EPA pull its files and only

provide digital versions on discs. That was not true. If it were true, why is there a legal box full of paper copies of other files still in the Pack Library?

Fortunately for our community Dorian and EPA were not able to erase the files out of existence...

Before the Administrative Record was pulled under false pretenses by Dorian and EPA, (b) (6) used a digital camera to photograph it from cover to cover. He would go back shortly after this and the Administrative Record was gone. We located the JPEGS of the Administrative Record amongst thousands of pages of other files in February 2012. More on that later-

For some reason, David Dorian did provide a disc of the Administrative Record files to our Riverkeeper, (b) (6), who likely forgot he even had them. (b) (6) later gave a copy of the disc to (b) (6)... which takes me back to when Congressman Shuler's office was still heavily involved in wanting to get to the bottom of what happened here.

Staffer (b) (6) let me know the OIG was sending Special Agent Polk from the Criminal Investigation Division to meet with me. This is from March 2012:

Good morning (b) (6)

It is my understanding that you will be interviewed by an Agent Polk from the IG's office next week. I have been in touch again with the IG's office in Washington, after the letter we sent on behalf of the community last month from the documents and cd's you provided Congressman Shuler requesting his office investigate the listed concerns. The IG's office contacted us again and let us know that during processing of the mail in DC, which includes x-raying all mail to ensure safety due to past terrorism threats, the cd's our office provided (the originals you gave us) became irradiated and there is no information on them.

Can you provide another set of cd's to the agent next week when you are interviewed or would you like to bring me another set and I can overnite them Fed-Ex to the DC office? Glad to hear that the IG's office is coming in person to listen.
Thanks

Chad Eaton
Director of Public Affairs
Congressman Heath Shuler
North Carolina 11th District
828-252-1651

In the lead up to the interview with CID, Agent Polk did call. I had met him as I have alluded to the first week of May 2010 in Swannanoa, NC at Moments Coffee Shop. Almost two years had elapsed and he called my during a work break.

Keep in mind when we met almost two years earlier, it had been very cordial and that was how the conversation started when he called to set up a time to meet.

However, things ended up on a very sour note because after I had excitedly told him that we had located pictures of every single page in the Administrative Record and it bolstered the assertions I had made two years earlier and we now had proof. I told him that copies of those images had been made and that other people had them.

At that point the tenor shifted because instead of being curious as to the contents of the Administrative Record, it was more about determining who else had seen the files; who had the files.

As I have already touched on- I was surprised and shocked that I was being, at first, asked to name the names. Then it turned into being yelled at to NAME THE NAMES... WHO HAS THE FILES....

I told him a lot of people did and even more do now. When I told this story to my wife, our kids overheard and ran around the house yelling name the names, Tate, name the names! If only they knew what it felt like.

I did tell Agent Polk that (b) (6) and (b) (6) were two people who had the files considering I had shared that it was (b) (6) who had made the original photographs.

Agent Polk did come to town with another agent and they interviewed me and (b) (6) (b) (6) l. The split us up to conduct the interview and Agent Polk and (b) (6) talked of fishing excursions for the most part. This was late March 2012.

Agent Polk contacted (b) (6) d and they arranged to meet. (b) (6) d brought the disc of the Administrative Record files that Riverkeeper Hartwell Carson had been by David Dorian. (b) (6) provided the disc to Agent Polk.

On April 18, 2012, Franklin Hill sent a letter to me and he acknowledged files were, in fact, missing from the library, but he said that the only files EPA is required to provide are the Administrative Record files. Perhaps Hill forgot that it was the Administrative Record itself was the primary file that we had lodged complaints over for being missing. Hill said that EPA would send copies of the missing files by the end of the month, which came and went.

It was not until the the end of May 2012 that the copies arrived on disc that dated as being made on 5-22-12. Once again, the Administrative Record was withheld, there were only two files that were / are part of the Administrative Record were on this disc.

One was file 35185 missing 165 pages of 196 pages that was listed as a 31 page document with DOC of 2-22-91.

The other was file 10503465 from 4-4-2002 and it was the Action Memorandum for Enforcement.

None of the other missing files were on this disc.

The first file was listed as created in 2-22-1991 and the next file was shown as created on 12-20-2000- meaning only one file for the whole of the 1990's. Why is that?

I called Angela Miller and left a voicemail that I was reviewing the disc and once again files were withheld.

By June 2, 2012, the digital files that were on Riverkeeper (b) (6) [redacted] disc for the Administrative Record that Dorian had given him arrived at the library. On June 4, 2012, the disc was catalogued into the library and now belongs to the people of Buncombe County. The files were the same as the ones in the paper copy of the Administrative Record from May 2007.

The date of the files on that disc that finally makes it way to our library shows the disc was made on May 31, 2012.

Wonder where those files came from that were pulled over onto this disc?

The activities that are in question here may be violations of federal law, with some of the statutes of limitation period being 50 years starting in 1981.

I trust that everyone reading through what I have written understands and appreciates the amount of effort, time and energy expended by a remarkable small group of people who have simply wanted to see the clean up for the source, which has yet to happen, air sampling that is ongoing and immediate, a real and vigorous assessment of the Southside Village side of the disaster and accountability for the EPA and NCDENR officials who acted in duplicity with the contaminator..

Thanks for reading this email-

I know I have asked much because it is over 10,000 words and more than 25 pages, but I know that those interested in the same goals appreciate what it has taken for us to do this...

Peace and Respect-
(b) (6) [redacted]

PS> Here is the rest of Wendel's narrative for the site history... isn't interesting that there is no mention of the things that the Administrative Record contained that debunked WENDEL, RIGGER, STROUD and others' logic back in 1999?

>>>> Please understand that when Wendel was working on the NPL Final Scoring Report Draft in 2011 and the Final Version in 2012, she had no idea that we had located the Administrative Record files.<<<<
In July 1999, the North Carolina Department of Environment and Natural Resources (NCDENR), Division of Water Quality (DWQ), was contacted regarding an oily leachate in a ditch on a property adjacent to CTS (Ref 24, p. 6). At that time, NCDENR personnel collected samples from the ditch leachate and from two springs on the neighboring properties (Refs. 24, p. 6; 25, p. 1). Low levels of chlorinated solvents (TCE at 8.7 E parts per billion [ppb]) and petroleum constituents were detected in a leachate sample (Refs. 24, p. 6; 25, p. 5). One spring sample (lab no. 9G1298) contained 15,000 ppb TCE, in addition to other chlorinated solvents and pettoleum constituents (Refs. 24, p. 6; 26, pp. 3,22; 27, p. 3; 25, p. 16). The spring was used as a potable water supply until

about 1994, when it was abandoned due to poor taste (Ref 24, p. 6). The second spring sample (lab no. 9G1297) contained 21,000 M ppb TCE in addition to other chlorinated solvents (Refs. 24, p. 6; 26, p. 3; 27, p. 2; 25, p. 11). At the time of sampling, the spring was being used as a potable water supply for the residents at both properties (Ref 24, p. 6). Representatives from the NCDENR advised those residents to stop using the spring as a water source (Refs. 24, p. 6; 27, p. 1). The residents currently obtain water from the municipal supply (Ref 24, p. 6).

On July 28, 1999, the NCDENR DWQ identified nine drinking water wells within 0.25-mile of CTS and subsequently sampled those wells for volatile organic compounds (VOCs) (Refs. 24, p. 6; 28, p. 1). One of the nine well samples (Sample 9G1464) contained TCE at 270 M ppb (pre-ground water filter) and 170 M ppb (post-ground water filter) (Refs. 24, p. 6; 28, pp. 2-5; 26, p. 3). The M indicated that the sample was analyzed by GCMS (Refs. 24, p. 6; 28, pp. 2-5). The remaining ground water weUs were below the 0.25 ppb analytical detection limit for TCE (Refs. 24, p. 6; 28, pp. 6- 21). The NCDENR advised the residents not to use their well for drinking water (Ref 24, p. 6). The NCDENR subsequently requested that the EP A Emergency Response and Removal Branch (ERRB) review property information and determine if the property qualified for a removal action under the federal Superfund program (Ref 24, p. 6).

How is it possible for Pat DeRosa's August 16, 1999, Emergency Request for EPA's Emergency Response and Removal Branch to investigate the CTS site not be specifically addressed? It was 46 pages total and it is in the missing Administrative Record under file 35186. The original file number is 10519701.

If the file for this is in the Administrative Record, why is it omitted from Wendel's site history for the NPL Scoring Report?

On August 20,1999, CMC, Inc., (CMC) was issued an emergency delivery order from EPA to coordinate actions needed to connect four residences to city or county water and to supply potable water as needed (Ref 29, pp. 3-5, 6, 18). CMC responded to the emergency on August 21, 1999 (Refs. 29, pp. 10, 18; 30, p. 1). CMC provided the affected residences with potable water until a contracted plumber could begin installation of the city water lines to the residences (Ref 29, p. 18). On August 23, 1999, CMC received an additional delivery order to excavate contaminated soil from an impacted creek near the CTS property (Ref 29, p. 19). Soils were excavated, loaded into a dump truck, and transported offsite for disposal (Ref 29, p. 19). Upon completion of the excavation activities, CMC installed a siphon dam (Ref 29, p. 19). Topsoil was placed, seeded, and mulched in the affected area (Ref 29, p. 19). In September 1999, CMC contracted a local plumber to have two residences connected to city water (Ref 29, p. 18).

How is it possible for Wendel to NEGLECT to describe how the CTS-Asheville, Inc. Site NCSFN0406985 was created between the 16th of August and the 23rd 1999. It was a created despite the existence of the CTS of Asheville, Inc Site NCD003149556.

How is it possible for Wendel to NEGLECT to describe how the Mills Gap Road Groundwater Contamination Site NCSFN0406988 on 8-23-99 when the CTS of Asheville, Inc. had been created in 1980 AND then EPA created the CTS-Asheville Site with identical information as the CTS of Asheville, Inc. Site? The Mills Gap Road Groundwater Contamination Site was created with NO CORPORATE LINK and placed on the (b) (6) property contradicting EPA guidance and violating the (b) (6) 14th Amendment rights to equal protection under the law.

How is it possible that Wendel neglected to have even a reference for NCDENR Superfund Section Chief Pat DeRosa's 46 page Emergency

Investigation Request, but Wendel does give this reference for the crafty work from Fred Stroud on 8-23-99....

25. Fred Stroud, On-Scene Coordinator, EPA. Superfund Site Spill ID Request. Mills Gap Road Groundwater Contanunation, Spill 03 A4P5. August 23, 1999. 46 pages.

Looks like Wendel buried the letter from the state's Superfund Section Chief requesting and emergency investigation for EPA Region 4's Emergency Response and Removal Branch because as she repeatedly provided information linking CTS to the release of contamination that Stroud and Rigger ignore when they filed a falsified report to the USCG NRC on 8-23-99. In this file (the official file number for this move is 10802890) the cover sheet is requesting the creation of a new Superfund Spill ID. Stroud called it Mills Gap Road Groundwater Contamination Site and listed (b) (6) address as the address for this new site even though it was the furthest parcel away from CTS of Asheville, Inc. and despite Riggers explanation provided to you in the youtube clip (https://www.youtube.com/watch?v=_nAvu2iTBTo) (b) (6) t never received water from NCDENR or EPA or CMC or Fred Stroud. Therefore, on that point alone Rigger's assertion is made moot. The addresses that received city water were 275 and 277 ((b) (6) respectively). DeRosa's 46 page letter begins on the second page and is marked confidential and this version does not have a handwritten file number of 35186 written on it... its actual file number is barcoded on the bottom and it is 10519701. The file this was put under is 108028990 and it is missing one page because the top page is Stroud's request to create a Superfund Spill ID.

The reason Wendel may have opted to leave this portion of the site history out is because Stroud's page 1 request (file 10519700) is rendered moot with all the pages that follow under file 10519701.

Wendel, Stroud, Rigger and everyone else that participated in this scam thought no one would ever know better because the Administrative Record that really is, despite its obscene flaws relative to the paltry number of documents, the only thing needed to expose what they did here to the victims to protect the agency from the embarrassing and tragic liability for the health consequences and the development consequences for Southside Village and the $30,000,000.00 gated community that it is.

Now do you understand how it feels to have an investigator yelling for me to name the names of the people who had copies of the Administrative Record?

Now do you understand how it feels to have an investigator accusing me of filing RICO charges the following year?

Now do you understand how we feel in trying to get Arthur Elkins to do his job as Inspector General for the USEPA and it going nowhere up until now?

I trust that you do.

Zeller, Craig

From: (b) (6) [redacted]
Sent: Sunday, November 29, 2015 11:55 PM
To: Zeller, Craig
Cc: (b) (6) [redacted]
Subject: Re: My "public comment" to EPA
Attachments: Appointment Letter by Congressman Shuler (NC-11).pdf; Community Report.pdf

Attention: Craig Zeller
EPA Remedial Project Manager
US EPA Region 4
Superfund Division - 11th Floor
61 Forsyth Street, SW
Atlanta, GA 30303

November 29, 2015

Re: Public Comment for the Interim Remedial Acton Plan - CTS of Asheville, Inc. Superfund Site

Dear Mr. Zeller,

I also attended the EPA public information meeting at T.C. Roberson High School on October 13th and I strongly reiterate the strong public sentiment and desire expressed at the meeting for the proposed Interim Remedial Action Plan to include urgent and aggressive action to address the additional identified 1-acre area encompassing monitoring wells 6 and 7.

I agree with all of the comments provided to you by Dr. Jeffrey Wilcox on October 27 attached below with the following addenda:

(1) Current studies may give the impression that the source areas are static over time. This would be a false impression given by CTS Corporation in my opinion. Migration of the source over time has been an integral aspect of concern for a time-criticial response at this site. This was basis for the urgency identified in the 2002 Memorandum for Enforcement under the National Contingency Plan for oil and chemical spill responses that called for a 6-month response action timeline. The concern was the relative "topographical high" of the location of the DNAPL source and that if left unaddressed would be subject migration to new areas removed from the original source areas identified.

As Congressman Shuler's appointee in April 2011 on the community's behalf to review the data for the source areas at this site and to evaluate the efficacy of a proposed DNAPL sampling plan I cited these concerns then. (Please refer to the analysis in the attached pdf: Community Report.pdf). I believe all of the concerns are patent today and ever more urgent and require EPA to act or to force action at the earlier opportunity

(2) As your own October 2015 summary sheet of the proposed plan for the interim remedial action states "EPA is evaluating the feasibility of expanding the Interim Remedial Action treatment area to include the TCE mass in groundwater near MW6/M7. Expanding the treatment area now would require more resources in the short-term, **but would be more cost-effective in the long-term**." This, in itself, makes this the most appropriate and necessary response action at this time..

Thank you.

Sincerely,

(b) (6) [redacted]

Zeller, Craig

From: [redacted]
Sent: Monday, November 30, 2015 12:03 AM
To: Zeller, Craig
Subject: CTS issue

I used to live downstream from the CTS plant, I lived in the small mobile home park that is still down at the end of mills gap at the red light; there was a stream that ran through our park and literally under our mobile home and my bedroom extended out over the creek that had the toxins dumped into it. We also had a pond on the park's property that all of us kids would play around and we played in the creek; there were days when we would go searching for salamanders and tadpoles only to find they were nowhere to be found because there were "soap suds" on the water or oily rainbow film on top of the water, or brown sudsy crud and so forth, I knew I didn't want to stick my hands in that stuff, but my brother did and he also caught fish out of the pond and ate them frequently – he now has kidney cancer that the doctor has described as most likely being caused by toxins that he ingested.

My husband and I were sharing childhood stories and I found out that his Aunt worked at CTS at the same time that were playing in the creek – she was the one designated to literally pour the TCE into the creek; we did not know each other back then obviously but his aunt was pouring TCE in at the same time we were playing in the creek. I began my research on TCE and found out that the stabilizer caused blue stains and my husband instantly screamed that omg that must have been why his Aunt came home from work with blue hands all the time, not every day but most of the time. She literally was allowed to immerse her hands into the stuff!!! She would be a very vocal person about this disaster if she were not already dead from an unknown nervous condition that caused tremors and speech tremors etc. her nervous system was destroying itself – this is a side effect of poisoning by TCE!!!

It's a shame that this clean up is deliberately being drug out – it's as if the legal system wants to keep it tied up until those that are damaged and dying from these toxins actually die off so there are no witnesses !!!!
This has got to be handled and quickly, clean up is a must!!! And the air plumes are worse than the liquid form from the research I have done so allowing the air to filter it will only increase the amount of people sickened or killed by this TCE. It is dangerous and if you would look into the stats and do more research you could find enough people injured by this to see that it is a must clean up.

Between CTS and the TCE creeping through the fractures in the earth and traveling all over this area and the coal ash that is being driven down the highway from Duke to the Airport so they can hide the darn stuff in the middle of the night – the whole of south asheville is going to become a super super fund sight not just super fund but double that; why is this city allowing these types of toxins to remain in our area and expect the people to just accept it?? Between the coal ash and the TCE we in the south asheville area appear to be guinea pigs for the legal system.

And it's about time that some research money was spent researching DOWN stream from CTS towards Earth Fare so far it appears that there has not been much if any research of that area, we had floods due to the pond in our mobile home park and it was not unusual for us to be wading hip deep in that water to get to higher ground until the water receded, our home actually was roped off due to the dirt washing out from under our home and we had to place a huge steel I-beam under it to support it – making more of the creek exposed so that when I slept with the windows open I was breathing the air plume as a child. These are the things that need to be looked into – who was affected, how were they affected, where has it traveled other than Pinner's Cove and the immediate housing developments – there are other homes that have been neglected and people who used to live there that could very well have been affected like my brother yet we no longer live there, all my friends that road my school bus during a high school reunion many years ago many of these friends were unable to attend due to illness that after hearing what was wrong with them could be traced back to exposure to the TCE when they were growing up across the street, next door etc. to CTS. Look as far back as the

70's time period and you will be astounded at the illnesses and deaths in that immediate neighborhood. That was the time period that my husband's Aunt was told to pour those toxins in the creek water.

Well it is pushing midnight I have to get this sent or you will disregard it.
(b) (6)

Sent from Mail for Windows 10

BUNCOMBE COUNTY GOVERNMENT
NORTH CAROLINA

Commissioners Office

Chairman	District 1	District 2	District 3
David Gantt	Holly Jones	Ellen Frost	Joe Belcher
	Brownie Newman	Mike Fryar	Miranda DeBruhl

November 30, 2015

Mr. Craig Zeller
U.S. EPA Region 4
Superfund Division
61 Forsyth St. SW
Atlanta, GA 30303

Re: CTS Plan of Remediation

Dear Mr. Zeller:

As Chairman of the Buncombe County Board of Commissioners, I am writing to comment on the plan of remediation of the former CTS property recently submitted to the EPA by CTS and currently under consideration. I understand that the proposed CTS plan is intended to address the terms of the 2004 Administrative Order and Settlement Agreement on Consent (AOC) for Remedial Investigation and Feasibility Study between EPA and CTS.

Since the contamination issue first arose in 1985, the Buncombe County Commission has been very concerned about the dangers to the health and welfare of our citizens posed by contamination at the former CTS facility. In 2008, four wells near the CTS site tested positive for ground water contaminates including TCE, threatening the drinking water supply. The County responded to this information by authorizing the expenditure of $225,000 to construct City of Asheville water lines to The Oaks subdivision. In 2011, to assist with the remediation of the property, the County paid $173,700 to demolish the CTS facility. In 2014, to insure a safe drinking water supply, the County agreed to pay for the installation of more City water lines to homes located within a one mile radius of the CTS site, at a cost of $1,644,555.

The Board of Commissioners agrees that the remediation process has taken far too long, and feels that whatever plan is approved by EPA should be a full and comprehensive solution which assures the safety and comfort of the citizens of Buncombe County. If the EPA, which is the voice of the citizens, believes that it is necessary for CTS to remediate 2.5 acres instead of the proposed single acre, we believe that EPA should press for this plan, even with the threat of litigation.

200 College Street, Room 316 - Asheville, NC 28801
828.250.4001 828.250.6076
buncombecounty.org

In addition, the plan should require CTS to reimburse the citizens of Buncombe County for the $2,043,255 in expenses incurred by the County as "necessary costs of response" to the threat to public safety created by CTS' contamination of its property. Such expenditures are clearly justified under the national contingency plan for remediation of contaminated sites.

I sincerely hope that EPA will agree with our position on this important issue. Please let me know if I can provide any further information or comment on the remediation plan. Thank you in advance for your consideration.

Sincerely,

David Gantt
Chairman

Cc: Commissioners
County Manager
County Attorney

APPENDIX D

U.S. Environmental Protection Agency
Superfund Proposed Plan for Interim Remedial Action
CTS of Asheville, Inc. Superfund Site
Asheville, Buncombe County, North Carolina

October 2015

INTRODUCTION

The Region 4 office of the U.S. Environmental Protection Agency (EPA) is issuing this Proposed Plan about the Interim Remedial Action at the CTS of Asheville, Inc. Superfund Site (CTS site). This Proposed Plan presents the alternatives considered in the Focused Feasibility Study (FFS) to address the Non-Aqueous Phase Liquid (NAPL) and trichloroethene (TCE) underneath the former CTS plant. The FFS and Proposed Plan are available for review and the public is invited to comment on the documents during a 30 day public comment period.

SITE BACKGROUND

The CTS site is located at 235 Mills Gap Road in Asheville, NC 28803. International Resistance Company, (now Northrop Grumman Systems Corporation as the result of a series of mergers) owned and operated the site from 1952 to 1959, when CTS of Asheville, Inc. purchased the real property, building and equipment. Arden Electroplating, Inc. leased a portion of the building from December 1985 until December 1986, when it was sold to Mills Gap Road Associates (MGRA). The site has been vacant/unoccupied since the mid-1990s.

CTS manufactured electronic components used in auto parts and hearing aids from 1959 to April 1986 when plant operations ceased. Small electronic components were electroplated with tin, nickel, zinc and silver as one step in the process. Solvents, including TCE were used to clean, or degrease, the parts before

Community Involvement Opportunities

Public Comment Period

Dates: October 1, 2015 – October 30, 2015
Purpose: To solicit comments on the Proposed Plan for Interim Remedial Action

Public Meeting

Date: October 13, 2015
Time: 6:00 PM
Place: T.C. Roberson High School Auditorium located at 250 Overlook Road in Asheville
Purpose: To discuss details of the Proposed Plan for Interim Remedial Action

EPA Contacts

Direct your comments to:
Craig Zeller, EPA Remedial Project Manager via email zeller.craig@epa.gov or U.S. mail to: US EPA Region 4, Superfund Division – 11th Floor, 61 Forsyth Street, SW, Atlanta, GA 30303

Further questions, please contact:
Angela Miller, EPA Community Involvement Coordinator, miller.angela@epa.gov or (678) 575-8132.

electroplating. Disposal and/or recycling activities at the facility prior to 1959 are unknown. From 1959 to 1980, metal-bearing rinse waters and alkaline cleaners that could not be reclaimed from the electroplating process were reportedly disposed of through the municipal sewer system, while concentrated metals and solvent wastes were placed in drums for off-site disposal/recycling. After 1980, wastes were accumulated in drums on-site prior to off-site disposal/recycling.

Numerous environmental investigations have been conducted at the CTS site since the late 1980s. The Site was proposed to the National Priorities List (NPL) in March 2011, and became Final on the NPL in March 2012.

PREVIOUS CLEANUP ACTIONS

Three removal actions have been conducted at the Site under a 2004 Administrative Order on Consent between EPA, CTS and MGRA. From July 2006 to July 2010, a Soil Vapor Extraction (SVE) system operated at the site to remove volatile organic compounds (VOCs) from the subsurface, above the groundwater table. An estimated 6,473 pounds of VOCs were removed from the unsaturated zone over that four year period. The former building was demolished in December 2011.

From September 2012 to August 2014, CTS installed 101 water supply filtration systems in residences located within a one mile radius of the Site who relied on groundwater as their drinking water supply. The filtration systems were installed as a precautionary measure. In 2014 and 2015, municipal water supply lines were installed in the vicinity of the Site by Buncombe County. Eighty-seven residences with filtration systems elected to connect to the municipal water line. The remaining water filtration systems will continue to be maintained by CTS until they are no longer warranted.

In September 2014, a springs vapor removal system was installed by CTS on property immediately to the east of the Site, to reduce TCE concentrations in outdoor/indoor air. The remediation system includes a combination of air sparging and vapor extraction. Air sparging pumps air into the surface water and subsurface at seven locations. Vapors are extracted using a vacuum connected to extraction points at 12 locations and then treated by carbon in canisters. The area was covered with a low density polyethylene liner to increase the system's efficiency. Construction began on September 10, 2014 and the system has been in continuous operation since October 21, 2014. Monitoring indicates the system has been very effective at reducing TCE concentrations in the air and spring water. As of mid-April 2015, the vapor system removed approximately 42 lbs. of VOCs from the environment.

CTS also committed to conduct a site-wide Remedial Investigation/Feasibility Study under the terms of an Administrative Settlement Agreement and Order on Consent, which took effect on January 26, 2012. The FFS that lays the foundation for this Proposed Plan was developed by CTS according to that agreement.

SITE CHARACTERISTICS

The area surrounding the Site is rural and contains residential and light industrial properties. The Site is relatively flat and is situated on a "saddle" between Busbee Mountain to the north and Brown Mountain to the south-southwest. The geology under the site consists of fill material, residual soil (overburden) and bedrock. The depth to the groundwater table generally fluctuates from

15 to 49 feet below ground surface (bgs), depending on rainfall. The depth to bedrock ranges from 28 to 81 feet bgs.

Groundwater velocity is in the 10 to 100 feet per year range. Groundwater in the overburden generally flows two directions; towards the eastern springs remediation area, and to another springs area to the west of the Site. There is an approximate one acre plume of light NAPL that is weathered fuel oil. This one acre NAPL plume is mixed with high concentrations of TCE. There is a dissolved phase VOC (only) plume extending north of the NAPL area that moves east and west towards the springs discharge zones. Please see figure on page 7.

SCOPE AND ROLE OF THE INTERIM REMEDIAL ACTION

The scope of this Proposed Plan is an interim NAPL/TCE source control action that will be followed up later with a Final Site-wide cleanup decision. The area to be addressed with this interim action is the one acre source area illustrated on the attached figure. This source control action addresses approximately 40,500 cubic yards (CYs) of material in the saturated zone between the observed water table and top of bedrock.

At present, the treatment area of this Proposed Plan does not include the high levels of TCE (only) in groundwater north of the designated one acre source area, near monitoring well clusters MW6 and MW7. This area is also shown on the attached figure. Under this Proposed Plan, any residual NAPL/TCE mass in the subsurface that was not treated with this Interim Remedial Action, as well as TCE in the deep (bedrock) aquifer, will be addressed with a Final Site-wide cleanup decision.

However, the EPA is evaluating the feasibility of expanding the Interim Remedial Action treatment area to include the TCE mass in groundwater near MW6/MW7. Expanding the treatment area now would require more resources in the short-term, but would be more cost-effective long-term from a Final Site-wide cleanup perspective.

SUMMARY OF SITE RISKS

Groundwater at the Site is contaminated with chlorinated solvents, such as TCE, cis-1,2-dichloroethene (cis-DCE), and 1,1,1-trichloroethane (TCA). These chemicals are considered hazardous substances under Superfund. TCE was detected in groundwater at levels which exceed the EPA drinking water standard of 5 parts per billion. These contaminants pose a potential risk to human health and the environment, particularly through air inhalation and/or drinking water.

INTERIM REMEDIAL ACTION OBJECTIVES

The general Interim Remedial Action Objective (RAO) for this Proposed Plan is to significantly reduce the mass of NAPL and TCE that is the source of the dissolved-phase VOC groundwater plume. Over time, while the Final Site-wide cleanup plan is developed, the dissolved-phase VOC plume is expected to decrease in size and concentration. The specific RAO for this Proposed Plan is:

- Reduce the TCE concentrations in saturated soil, NAPL and groundwater by 95%.

Ninety-five percent reduction will be determined by pre-treatment and post-treatment verification sampling and analysis

of saturated soil, NAPL and groundwater within the one acre source zone.

SUMMARY OF ALTERNATIVES

The FFS Report evaluated four proven remediation technologies to address the NAPL/TCE source area. As required by EPA guidance, a "No-Action" alternative was retained to serve as a baseline when comparing to the other alternatives. A description of the alternatives is summarized below.

Alternative 1: No Action
This "status quo" alternative assumes nothing would be done in the short term to address the NAPL/TCE source area. The No Action alternative defers all required cleanup work to the Final site-wide cleanup plan that is not expected for several years.

Alternative 2: Multi-Phase Extraction
Multi-phase extraction (MPE) removes NAPL, groundwater, and soil vapor from the subsurface using vacuum well(s). MPE would involve installation of extraction wells and a system to recover the NAPL. The extracted fluids and vapor would be treated in an aboveground treatment system on-site. After separation, the groundwater would be treated and disposed on-site, while the NAPL would be containerized and disposed off-site. It was assumed that the MPE system would have to operate for a 10 year period. The estimated cost to implement the MPE alternative is $2,670,000.

Alternative 3: Electrical Resistance Heating
Electrical resistance heating (ERH) involves heating the subsurface using electrodes installed in the zone of contamination. The electric current passed between the electrodes heats the saturated zone where there is sufficient moisture to conduct electricity. The heat "boils" the NAPL/TCE and vent wells are used to recover the vapors. The vapors are treated aboveground and discharged to the air. Any NAPL accumulation in the vent wells would be recovered and transported off-site for disposal. It was assumed that 19 months would be required to design, install and fully operate the ERH system to meet the RAO. The estimated cost to implement the ERH alternative is $4,150,000.

Alternative 4: In-Situ Chemical Oxidation
In-situ chemical oxidation (ISCO) involves addition of chemicals into the zone of contamination via injection points. The chemicals oxidize the NAPL/TCE and break down the contaminants into harmless by-products like carbon dioxide and water. ISCO is typically implemented with a primary injection event and one or more polishing injections to reduce contaminant concentrations and mass to the desired level. Chemical oxidation using catalyzed hydrogen peroxide gives off heat, so vent wells would be required to recover vapor and any NAPL. ISCO would require installation of injection wells and an aboveground system to recover and treat vapors. It was assumed that ISCO would require three years to complete, including one primary injection event and two polishing steps. The estimated cost to implement the ISCO alternative is $3,820,000.

Alternative 5: Surfactant Flooding
Surfactant flooding involves injection of a substrate into the zone of contamination to increase the mobility of the NAPL phase. The NAPL and groundwater are then removed from the subsurface via extraction wells. After separation aboveground, the groundwater would be treated and discharged to the municipal sewer system,

while the NAPL would be containerized and disposed off-site. Surfactant flooding would require installation of injection/extraction wells, and an aboveground treatment system. It was assumed that surfactant flooding would require two years to complete, including a primary flooding event and one follow-up step. The estimated cost to implement the surfactant flooding alternative is $3,520,000.

EVALUATION OF ALTERNATIVES

Remedy selection under Superfund requires that each alternative be evaluated by nine criteria. The first two criteria are known as Threshold Criteria. These two criteria must be met for a cleanup alternative to be selected:

1) ***Overall Protection of Human Health and the Environment:*** How the alternatives achieve protection and how risks are eliminated, reduced or controlled.
2) ***Compliance with Applicable, or Relevant and Appropriate Requirements (ARARs):*** Comply with other Federal and State environmental laws or regulations that apply to the cleanup action.

The next five criteria are referred to as Balancing Criteria. This set of criteria serves as the primary basis upon which each alternative is compared and analyzed to understand the trade-offs and distinct advantages/disadvantages.

3) ***Long-Term Effectiveness and Permanence:*** Ability of each alternative to meet the RAOs and stay protective over the long-term.
4) ***Reduction of Toxicity, Mobility and Volume (TMV):*** Addresses Superfund's preference for treatment as a principal element of the site cleanup.
5) ***Short-Term Effectiveness:*** Management of remedy construction activities to ensure adequate protection of on-site workers, adjacent communities and the environment.
6) ***Implementability:*** The availability of services, access to property, construction equipment and other administrative/ technical factors associated with the cleanup.
7) ***Cost:*** The Net Present Value of the alternative, including operation/maintenance activities, over the assumed lifetime of the cleanup project.

The final two criteria are called Modifying Criteria.

8) ***State Acceptance***
9) ***Community Acceptance***

EPA will issue a final cleanup decision only after consulting with the State of North Carolina and after considering comments received from the community during the public comment period.

EPA's PREFERRED ALTERNATIVE

EPA has selected Alternative 3, Electrical Resistance Heating (ERH), as the preferred alternative to address the NAPL/TCE source area. ERH was the most aggressive and effective source control remedy evaluated in the FFS. ERH provides the highest level of certainty to meet the RAO, as the technology has demonstrated greater than 95% TCE removal efficiencies. ERH can be implemented in the least amount of time, and provides the greatest long-term

permanence. Although ERH has a slightly higher total cost, it is a one-time source control and treatment event with no longer term operation and maintenance costs.

COMMUNITY PARTICIPATION

EPA encourages the public to provide comments on the Proposed Plan during the 30 day public comment period which begins on October 1st and extends through October 30, 2015. Documents supporting the Preferred Alternative can be found on line at http://semspub.epa.gov/src/collection/04/AR63944. Upon timely request, EPA will extend the comment period for an additional 30 days. Comments may be emailed to: Zeller.Craig@epa.gov. Hard copies may be sent via U.S. Mail, to Craig Zeller, US EPA Region 4, Superfund Division – 11th Floor, 61 Forsyth Street, SW, Atlanta, GA 30303.

PUBLIC MEETING

EPA will host a public meeting on Tuesday, October 13, 2015, at 6:00pm in the auditorium of the T.C. Roberson High School located at 250 Overlook Road in Asheville. Representatives from EPA will present the rationale behind the Proposed Plan for the NAPL/TCE Interim Remedial Action at the CTS of Asheville, Inc. Superfund site, and answer any questions the public may have regarding the interim proposed plan.

CONTACT INFORMATION

EPA

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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

NCDEQ

Nile Testerman
919.707.8339
NILE.TESTERMAN@NCDENR.GOV

NCDHHS Website

The State Center for Health Statistics of the N.C. Department of Health and Human Services has completed an updated cancer study for the community within 1-mile radius of the CTS NPL site. The report will be available soon at http://epi.publichealth.nc.gov/oee/hace/by_site.html#cts .

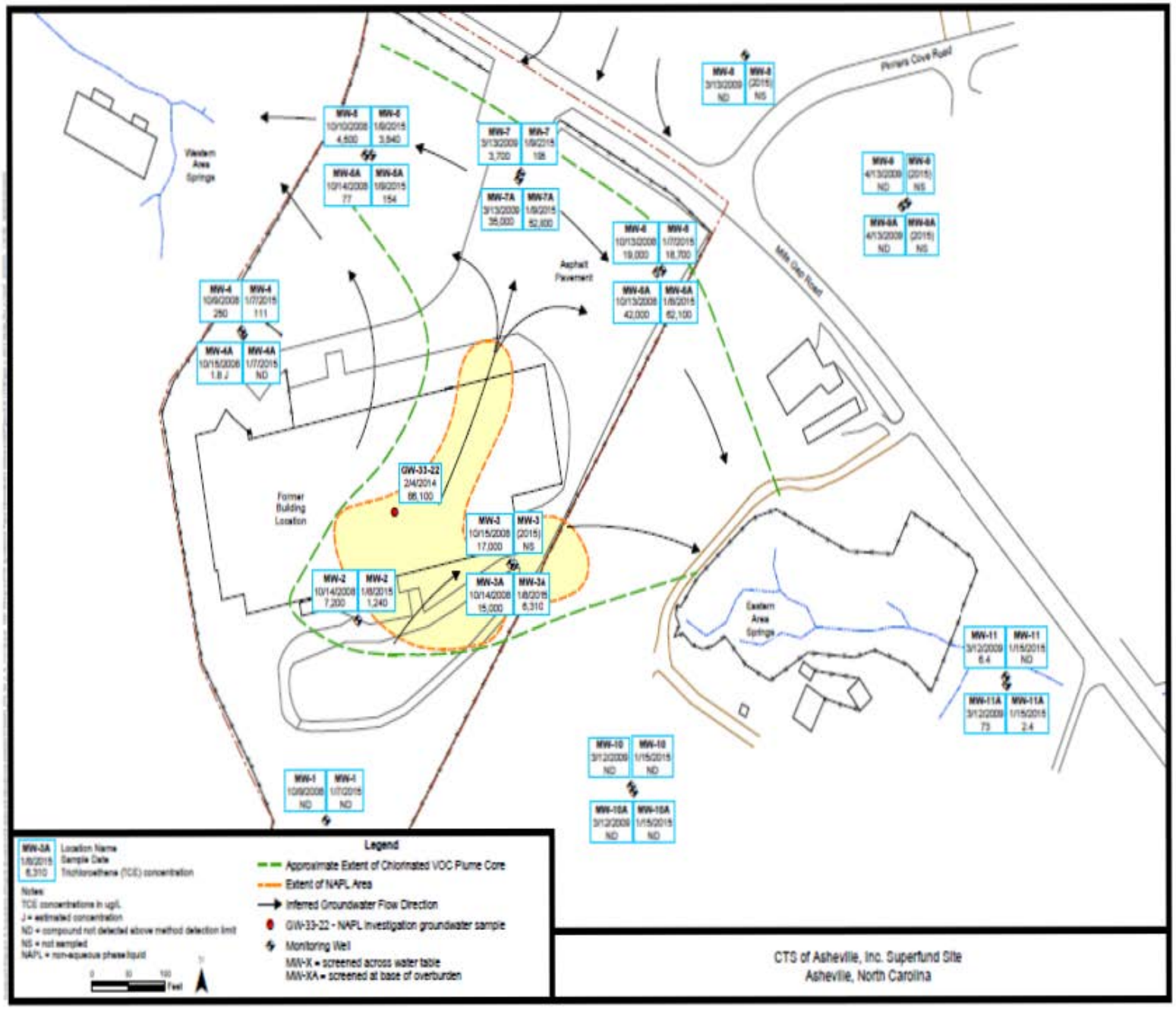
Websites created by community members

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

Community Groups

Concerned Citizens for Mills Gap Cleanup
Glen Horecky
GEH4@MSN.COM

TAG Recipient:
POWER Action Group
Lee Ann Smith
UPTHISHILL@GMAIL.COM


Perkins Cove Road
Mills Gap Road
Asphalt Pavement
Former Building Location
Western Area Springs
Eastern Area Springs
MW-6 3/13/2009 ND
MW-6 (2015) NS
MW-6 10/10/2008 4,500
MW-6 1/9/2015 3,940
MW-6A 10/14/2008 77
MW-6A 1/9/2015 154
MW-7 3/13/2009 3,700
MW-7 1/9/2015 108
MW-7A 3/13/2009 36,000
MW-7A 1/9/2015 62,800
MW-8 10/13/2008 19,000
MW-8 1/7/2015 18,700
MW-8A 10/13/2008 42,000
MW-8A 1/8/2015 62,100
MW-9 4/13/2009 ND
MW-9 (2015) NS
MW-9A 4/13/2009 ND
MW-9A (2015) NS
MW-4 10/9/2008 250
MW-4 1/7/2015 111
MW-4A 10/15/2008 1.8 J
MW-4A 1/7/2015 ND
GW-33-22 2/4/2014 86,100
MW-3 10/15/2008 17,000
MW-3 (2015) NS
MW-2 10/14/2008 7,200
MW-2 1/8/2015 1,240
MW-3A 10/14/2008 15,000
MW-3A 1/8/2015 6,310
MW-11 3/12/2009 6.4
MW-11 1/15/2015 ND
MW-11A 3/12/2009 73
MW-11A 1/15/2015 2.4
MW-10 3/12/2009 ND
MW-10 1/15/2015 ND
MW-10A 3/12/2009 ND
MW-10A 1/15/2015 ND
MW-1 10/9/2008 ND
MW-1 1/7/2015 ND
MW-3A Location Name
1/8/2015 Sample Date
6,310 Trichloroethene (TCE) concentration
Notes:
TCE concentrations in ug/L
J = estimated concentration
ND = compound not detected above method detection limit
NS = not sampled
NAPL = non-aqueous phase liquid
0 50 100 Feet
Legend
Approximate Extent of Chlorinated VOC Plume Core
Extent of NAPL Area
Inferred Groundwater Flow Direction
GW-33-22 - NAPL investigation groundwater sample
Monitoring Well
MW-X = screened across water table
MW-XA = screened at base of overburden
CTS of Asheville, Inc. Superfund Site
Asheville, North Carolina