

Site Assessment and Removal Timeline - CTS of Asheville Site

Date	Activity	Notes
1953-1985	Plant Operation by CTS	
30-Oct-85	Preliminary Assessment (PA) Report submitted to Region 4 EPA Superfund by NC Dept of Human Resources, Div. of Health Services	This was the first of four efforts by the State and EPA to qualify the site for listing on the National Priorities List (NPL) for cleanup under the Federal Superfund Remedial process. A Preliminary Assessment (PA) is the first step in the Remedial Site Assessment process. At that time, PA reports contained only operational history and site characteristics, and not collection of samples. A Site Inspection (SI), which involves sampling, could only be tasked on the basis of a PA that found indications of a release of contaminants. No release was identified at this time, so the PA report therefore recommended no further remedial action planned under Superfund (NFRAP).
31-Aug-87	Report of Site Assessment Services by Law Environmental, Inc.	Report requested by CTS due to pending sale of property. Recommendations listed removal of hazardous materials and evaluation of the groundwater.
February-89	The NC Inactive Hazardous Sites Branch (IHSB) becomes operational pursuant to 1987-1989 legislation, rulemaking, and funding authorization.	IHSB begins hiring staff. Establishment of prioritization system for State Priority List (SPL).
22-Feb-91	Site Screening Inspection Phase II by EPA Field Investigation Team (FIT) Contractor NUS Corporation	The second effort to qualify the site for listing on the NPL. The Site Screening Inspection (SSI), at that time the equivalent of an SI, was tasked by EPA due to the results of the August 1987 assessment done on behalf of CTS. The SSI found contamination in soils and sediments on the site, and in surface water. The nearest well identified in the report is 2 miles away. A sample from that well contained only lead caused by the well construction. Because of a lack of known impacted receptors, the site did not score high enough on the Superfund Hazard Ranking System (HRS) to qualify for NPL listing, and recommendation was for no further remedial action planned under Superfund. The site was referred to the IHSB.
30-Nov-93	NC Div. of Waste Management (DWM) State Inactive Hazardous Sites Branch (IHSB) Site Evaluation	Site is evaluated and entered on the IHSB list. Evaluation was based on available data from previous investigations. Because no impacts to receptors known at that time, State Priority List (SPL) score is low.
15-Dec-97	IHSB issues Order to Submit Notice of and to Record an Inactive Hazardous Substance or Waste Disposal Site.	CTS had 180 days to submit a survey plat of the property
01-May-98	Phase 1 of Southside Village subdivision begins.	Information supplied by Mr. Durand

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08-Jul-98	IHSB contracts ENSCI to prepare Notice of and to Record an Inactive Hazardous Substance or Waste Disposal Site	Plat for 8.69 acre fenced plant area was recorded 9/08/1998.
12-Jul-99	Springs on nearby property sampled by NC Div of Water Quality. First indication of contaminated groundwater at the site.	Potable supply spring southeast of plant site sampled in response to citizen complaint. No taste or odor issues were reported prior to this.
28-Jul-99	Potable wells sampled by NC DWQ	Nearby wells sampled as a follow up to contaminated spring sampling. Contamination found in the springs and in one residential supply well.
16-Aug-99	Immediate Removal Evaluation Request submitted by NC DWM to EPA	Based on the contamination found in the springs and one well by DWQ, DWM requested EPA assistance in supplying these users with alternative water supplies under CERCLA Removal authority. Under this authority, EPA Superfund Emergency Response and Removal Branch (ERRB) can act at sites to remove imminent threats to human health and the environment.
23-Aug-99	EPA Emergency Action Memorandum issued	Immediate supply of bottled water and subsequent EPA Removal funding for connection of affected residences to Asheville-Buncombe Water Authority supply is authorized by EPA ERRB. These residences have since been connected to the municipal water system.
14-Sep-99	Additional Sampling by NC DWM of surrounding wells and property	One additional well and two garden plots were sampled. No additional contamination was found.
08-Nov-99	EPA Emergency Response and Removal Branch (ERRB) Start Contractor (Tetra tech) conducted soil sampling on-site and sediment samples from neighboring properties.	This Removal Assessment was conducted under the CERCLA Removal authority. Contamination detected in soils on-site and in sediments.
23-May-00	NC DWM conducts sampling of potable wells and surface water pathway as part of CERCLA Expanded Site Inspection (ESI)	The ESI is the third effort to qualify the site for listing on the NPL. 9 wells previously identified by NC DWQ were resampled and surface water and sediment samples were collected from the surface water pathways flowing east and west from the site. Springs to the east are impacted by TCE, nothing detected in the springs flowing west. Only the well previously identified as impacted had any contaminants detected.

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01-Aug-00	EPA REAC Contractor preformed geophysical survey for buried sources. Resmpling of springs was done.	Magnetic and electromagnetic surveys identified anomalies on-site. Springs still indicate high levels of contamination.
01-Sep-00	EPA REAC Contractor installed trenches to investigate anomalous areas and other areas identified by surface debris.	Nothing was found other than a few pieces of piping.
01-May-01	EPA REAC Contractor utilize a Geoprobe unit to characterize the soils beneath the building	EPA conducted more extensive soil sampling to better characterize the site for a soil cleanup as an EPA Time Critical Removal. In general, the EPA Emergency Response and Removal Action does not have authority to conduct or compel a groundwater cleanup. Several areas of high concentrations of contaminants were located underneath the building.
08-May-01	NC DWM submits ESI report to EPA Region IV Superfund	The ESI is the third effort to qualify the site for listing on the NPL. Contamination of groundwater/ surface water is documented, however, due to no contaminated water in potable use, the site was recommended for No Further Remedial Action under Superfund. The limited number of impacted targets (impacted drinking water originally discovered in four households) resulted in an HRS score too low to qualify the site for NPL listing and cleanup under the CERCLA Remedial program. EPA and NC DWM focus on enforcement through EPA Removal Authority.
01-Feb-02	EPA conducts a Potentially Responsible Party search	This search identifies PRP's for inclusion in any Administrative Order on Consent (AOC).
04-Apr-02	EPA submits a Request for a Responsible Party-Lead Removal Action by CTS and Mills Gap Road Associates.	A Removal Action allows EPA to begin to investigate ways to contain and control the contaminant source beneath the building.
22-Jan-04	CTS Corporation and Mills Gap Road Associates sign an Administrative Order on Consent with EPA.	AOC Statement of Work (SOW) requires CTS and Mills Gap Associates to evaluate the potential impact to wells within one-mile radius of site within areas that can be connected to public water, evaluate the removal and/or treatment of contaminants in the unsaturated zone beneath the building, evaluate the feasibility of removal/containment of surface water discharging from the springs.
17-Sep-04	Sampling and Analysis Plan (SAP) report submitted by PRP Contractor (Mactec) to EPA	Samples document a continuing impact to the springs on the east side of the site property. Additional soil sampling helps refine the suspected areas of higher contamination beneath the building. Six additional wells identified in this report as having a potential to be impacted by the contaminated groundwater plume. Sampling of these wells and others conducted in February 2006.

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17-Sep-04	Report of Removal Action Pilot Study submitted by PRP Contractor (Mactec) to EPA	A Pilot Study of the effectiveness of Soil Vapor Extraction (SVE) was run using 1 extraction well and 4 observation wells. The study concluded that SVE is a viable technique for the removal of VOCs from the unsaturated soils beneath the building.
Feb-05	Removal Action Plan submitted by Mactec to EPA	Identified the same six wells wells at potential risk and detailed design of full-scale SVE (Soil Vapor
Feb-06	Additional well sampling by Mactec as per AOC.	EPA's contractor sampled five wells: all five tested non-detect for all constituents tested, including the contaminants of concern at the former CTS plant. Of the six wells identified in the September 17, 2004 Mactec report to EPA, one resident chose not to have his well sampled, and three wells were either not in service or used only for bathing and laundry.
30-Jun-06	Site Reassessment Report (SRR) submitted to EPA Region 4 by NC DWM	This SRR was the fourth effort to qualify the site for listing on the NPL. The report was based on the most recent sampling data available. Due to the lack of contaminated groundwater being used for potable uses, and the distance to the nearest fisheries, the site was recommended for No Further Remedial Action Planned under Superfund.
Jul-06	Soil Vapor Extraction System becomes operational.	
26-Sep-07	Samples collected from Springs by NC DWM	Analysis indicates continuing impact to the springs. Higher levels than previously recorded were encountered in the small streams both east and west of the site.