



*EveryWhere. EveryDay.*

April 8, 2009

Ms. Bonnie Ware  
North Carolina Department of Environment and Natural Resources  
DWM, Superfund Section, Inactive Hazardous Sites Branch  
585 Waightown Street  
Winston-Salem, North Carolina 27107

**RE: Phase 1A Addendum and Limited Phase 1B Site Assessment Results  
Mills Gap Road Site  
Skyland, North Carolina  
NCD Number 003149556**

Dear Ms. Ware:

Attached is the Phase 1A Addendum and Limited Phase 1B Site Assessment Results Report for the subject site, prepared by MACTEC Engineering and Consulting, Inc. (MACTEC). As noted in the report, NCDOT provided approval for the remaining well location on NCDOT property last week, and well installation activities began on April 7, 2009. The information and data for that well location will be separately forwarded to you as soon as it is available.

If you have any questions regarding this report, please feel free to contact me.

Best regards,

CTS CORPORATION

Marvin E. Gobles, P.E.

Manager Environmental Services

MEG/lab

Attachment



engineering and constructing a better tomorrow

April 7, 2009

Mr. Marvin Gobles, P.E.  
CTS Corporation  
905 West Boulevard North  
Elkhart, Indiana 46514

**Subject: Transmittal of Phase IA Addendum and Limited Phase IB Site Assessment Results  
Mills Gap Road Site  
Skyland, North Carolina  
NCD Number 003149556  
MACTEC Project 6686-08-1744**

Dear Mr. Gobles:

MACTEC Engineering and Consulting, Inc. (MACTEC) is pleased to present this transmittal of Phase IA Addendum and Limited Phase IB Site Assessment results to CTS Corporation (CTS) for ground-water assessment activities related to the Mills Gap Road Site (Site). This letter briefly describes findings from the Phase IA Addendum and limited Phase IB Site Assessment activities, which were conducted in February and March of 2009.

In an effort to better understand the extent of ground-water contamination above bedrock and ground-water flow directions in the area of the Site, two on-site monitoring wells (MW-7/7A) and five off-site monitoring wells (MW-8, MW-10/10A and MW-11/11A) were installed within the unconsolidated formation ("overburden") in the locations shown in Figure 1. Bedrock monitoring wells MW-1B and MW-4B were installed in the general vicinities of wells MW-1 and MW-4/4A, respectively, to collect data regarding bedrock conditions at the Site.

Up to two additional off-site monitoring wells (MW-9/9A) were proposed in our approved January 21, 2009, work plan. However, an access agreement for installation of the monitoring wells was not obtained from the property owner (North Carolina Department of Transportation, NCDOT) until after the drilling activities were complete at the other locations. This installation of up to two monitoring wells on the NCDOT property commenced on April 7, 2009. After the well(s) have been installed and developed, a ground-water sample will be collected and submitted to the laboratory for analysis on a rush turnaround schedule for analysis of volatile organic compounds (VOCs) according to EPA Method 8260.

In accordance with the approved work plan, bedrock borings MW-1B and MW-4B were advanced until an apparent water-producing fracture was encountered. The bedrock boreholes were then logged using a suite of borehole geophysical logging methods, including caliper, temperature, fluid conductivity, acoustic televiwer and electromagnetic flow meter. The geophysical logs were used in conjunction with drilling information to determine the depth at which the screened interval was installed. Bedrock was encountered at a depth of approximately 43 feet below ground surface (bgs) in MW-1B and the well was screened across a fracture at approximately 140 feet bgs.



April 7, 2009

Bedrock was encountered at a depth of approximately 73 feet bgs in MW-4B and the well was screened across a fracture at approximately 95 feet bgs. Ground-water samples collected from the two bedrock wells were analyzed for the following:

- VOCs, according to Environmental Protection Agency (EPA) Method 8260B (plus tentatively identified compounds);
- Semi-volatile organic compounds (SVOCs), according to EPA Method 8260C (plus tentatively identified compounds);
- Hazardous Substance List metals, according to EPA Methods 6010B and/or 7470A (mercury, aqueous); and,
- Cyanide, according to EPA Method 9010.

The laboratory analytical results of the ground-water samples collected from the bedrock wells did not indicate concentrations of VOCs, SVOCs or cyanide above laboratory reporting limits. Concentrations of two metals, chromium and manganese, were detected above laboratory reporting limits in the ground-water sample collected from MW-1B. The detected concentrations are below the State Ground-water Standards. Concentrations of metals were not detected above laboratory reporting limits in the ground-water sample collected from MW-4B.


Ground-water samples collected from the overburden monitoring wells were submitted for analysis of VOCs according to EPA Method 8260. Laboratory analytical results of ground-water samples collected from monitoring wells MW-8, MW-10 and MW-10A did not indicate concentrations of VOCs above the State Ground-water Standards. Laboratory analytical results of ground-water samples collected from on-site monitoring wells MW-7 and MW-7A and off-site monitoring wells MW-11 and MW-11A contained concentrations of trichloroethylene above the State Ground-water Standard. Copies of the laboratory analytical reports and chains-of-custody records are attached.

Based on the laboratory analytical results of ground-water samples collected from the off-site monitoring wells, we recommend evaluating the results of the NCDOT well(s) prior to selecting proposed off-site bedrock well locations.

If you have questions regarding the information contained herein, please contact us at (828) 252-8130.

Sincerely,

**MACTEC ENGINEERING AND CONSULTING, INC.**

  
Susan E. Kelly, P.E., L.G.  
Senior Engineer

for   
permission

  
Matthew E. Wallace, P.E.  
Principal Engineer

SEK/MEW:sek

attachments: Figure 1 - Monitoring Well Location Map  
Laboratory Analytical Reports and Chain-of-Custody Records





MONITORING WELL LOCATION MAP  
 MILLS GAP ROAD SITE  
 SKYLAND, NORTH CAROLINA

DRAWN: <i>RCS</i>	ENG CHECK: -	DATE: APRIL 2009	PROJECT: 6686-08-1744
DFT CHECK: <i>Mew</i>	APPROVAL: <i>Mew</i>	SCALE: 1" = 200'	FIGURE: 1
REFERENCE: 2006 AERIAL PHOTOGRAPH FROM BUNCOMBE COUNTY GIS WEBSITE; MACTEC FIELD NOTES.			