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January 23, 2009

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

**RE: Modified Phase 1B Site Assessment Work Plan
Mills Gap Road Site
Skyland, North Carolina
NCD Number 003149556**

Dear Ms. Ware:

Attached is a Modified Phase 1B Site Assessment Work Plan for the subject site, prepared by MACTEC Engineering and Consulting, Inc. (MACTEC), following our phone conversation of January 16. As noted by MACTEC in the attached, NCDENR's assistance will likely be needed in obtaining access to off-site drilling locations.

If you have any questions regarding the attached, please feel free to contact me.

Best regards,

CTS CORPORATION

Marvin E. Gobles, P.E.
Manager Environmental Services

MEG/lab



engineering and constructing a better tomorrow

January 21, 2009

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

**Subject: Modified Phase IB Site Assessment Work Plan
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 Modified Phase IB Site Assessment Work Plan to CTS Corporation (CTS) for conducting additional ground-water assessment activities related to the Mills Gap Road Site (Site). A proposed Phase IB Site Assessment Work Plan, dated December 1, 2008, was submitted to the North Carolina Department of Environment and Natural Resources (NCDENR) on December 3, 2008. In a letter dated January 6, 2009, NCDENR provided comments to the proposed Phase IB Plan, stating their understanding that a Phase IB assessment would incorporate bedrock borings/monitoring wells at the Site. Work completed and evaluated during the Phase IA Site Assessment indicated elevated contaminant concentrations at several locations at the Site. Installation of bedrock borings/monitoring wells in locations where elevated contaminant concentrations are detected in the overlying formation/ground water is not recommended by applicable federal guidance, due to the potential for cross-contamination from drilling activities. This modified Work Plan briefly describes our proposed activities to be performed prior to determining appropriate locations for off-site bedrock wells, and for installation of two on-site bedrock wells at this time.

The Phase IA Site Assessment activities approved by NCDENR were completed in September and October 2008. The results were summarized in the Phase IB Site Assessment Work Plan dated December 1, 2009; therefore, a summary of the Phase IA results of are not described herein.

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 additional on-site monitoring wells (MW-7/7A) and up to eight off-site monitoring wells (MW-8/8A through MW-11/11A) will be installed within the unconsolidated formation ("overburden"), as shown in Figure 1. Two bedrock wells will be installed in the general vicinities of wells MW-1 and MW-4/4A to collect data regarding bedrock conditions at the Site.

In order to efficiently and effectively collect additional data, we propose to install/sample the proposed monitoring wells in two mobilizations. The on-site bedrock wells will be installed and

sampled during the first mobilization and the second mobilization will include installation and sampling of the two additional on-site wells (MW-7/7A) as well as the off-site wells.

Upon approval of the scope of work described herein, we will begin preparing access agreements for the four proposed off-site drilling locations. We anticipate that obtaining access agreements will take up to two months to complete.

Bedrock Wells

The two bedrock wells will be installed at the “first major fracture system” encountered in each boring, as directed by NCDENR. A six-inch diameter surface casing will be set to a minimum of three feet below the top of competent bedrock in each boring. The casing will be grouted into place and allowed to cure a minimum of 24 hours. A bedrock boring will be advanced below the surface casing using air rotary drilling techniques (nominal six-inch diameter air hammer bit). The bedrock boring will be advanced until an apparent water-bearing fracture is encountered, at which time the drilling tools will be removed from the borehole to allow for borehole geophysical logging. A suite of borehole geophysical analyses will be completed on the bedrock portion of the borehole.

Upon completion of the geophysical investigation, a two-inch diameter PVC monitoring well will be installed in the boring. The length of the screened interval will depend on the thickness of the fracture or fracture zone that is to be monitored (if more than one fracture is identified in a borehole, the most apparently productive/transmissive fracture will be selected for monitoring); however, we anticipate that a two-foot length of screen will be installed at the fracture/fracture zone. If the fracture/fracture zone to be monitored is located above the bottom of the boring, the base of the boring will be backfilled with bentonite to prevent the potential downward migration of ground water to potential fractures located below the monitored fracture. A sand pack will be placed around the well screen and to approximately one-foot above the well screen. A bentonite seal will be placed above the filter pack to the surface casing (i.e., to prevent potential short-circuiting that might occur with a cement grout seal and affect water quality in the monitored fracture). A bentonite-cement grout will be placed above the bentonite seal to ground surface.

If DNAPL is suspected in either bedrock boring, drilling activities will be suspended and NCDENR will be notified that we are abandoning the boring.

Ground-water samples will be collected from the newly installed bedrock monitoring wells in accordance with the sampling procedures described in our “Phase I Site Assessment Plan,” and submitted to the laboratory for analysis. Although the laboratory analytical results of soil and ground-water samples collected during the Phase IA Site Assessment activities indicate that the primary constituents of concern are volatile organic compounds (VOCs), NCDENR has requested that additional data for on-site constituents in ground water be evaluated prior to identifying the constituents of concern for the Site. Thus, ground-water samples collected from the bedrock wells will be analyzed for the following:

- VOCs, according to EPA Method 8260B (plus tentatively identified compounds);
- Semi-volatile compounds, according to EPA Method 8270C (plus tentatively identified compounds);
- Hazardous Substance List metals, according to EPA Methods 6010B and 7471A (mercury, soil) or 7470A (mercury, aqueous); and,
- Cyanide, according to EPA Method 9010.

Due to the close proximity of the proposed bedrock wells to previously installed Phase IA wells, we do not propose to collect soil samples for laboratory analyses during installation of the bedrock monitoring wells.

We will prepare a letter report summarizing the results of the bedrock well installation, including a description and evaluation of the geophysical investigation and the laboratory analytical results. This letter will be provided to NCDENR by March 13, 2009. We are currently scheduling this work in anticipation of NCDENR approval.

Overburden Wells

A “nested” water table well (MW-7) and Type III partially weathered rock (PWR) monitoring well (MW-7A) will be installed in the northern portion of the Site in accordance with the procedures described in our “Phase I Site Assessment Plan,” dated February 28, 2008, as well as our “Response to Phase I Site Assessment Plan Comments,” dated May 6, 2008.

Up to eight off-site monitoring wells will be installed upon receipt of access agreements for the four off-site locations. A soil boring will be advanced using nominal 4.25-inch diameter hollow-stem augers until auger refusal is encountered. Soil samples will be collected with a split-spoon sampler at approximate five-foot intervals. If the vertical distance between the apparent water table and auger refusal (i.e., top of competent bedrock) is greater than ten feet, a PWR well with a five-foot screened interval will be installed with the bottom of the well at the contact between PWR and bedrock. A “nested” water table well, constructed with a ten-foot screened interval, will be installed adjacent to the PWR well. If the distance between the apparent water table and top of rock is less than ten feet, then one well with a ten-foot screened interval will be installed with the bottom of the well at the contact between PWR and competent rock. The proposed off-site monitoring wells are located in areas where contamination from an overlying source area is not anticipated; therefore, the proposed off-site water table and PWR wells will be installed as Type II monitoring wells (i.e., cross-contamination from an overlying aquifer or source area is not likely; therefore installation of an outer casing is not warranted).

Ground-water samples will be collected from the newly installed monitoring wells in accordance with the sampling procedures described in our “Phase I Site Assessment Plan,” and submitted to the laboratory for analysis of VOCs according to EPA Method 8260B. We do not propose to collect soil samples for laboratory analyses during installation of these off-site monitoring wells, unless there is evidence of chemical staining, or elevated photo-ionization detector readings, that may indicate a need for further assessment.

Access to off-site drilling locations must be granted by the property owners for this second mobilization. MACTEC proposes to send a letter, including NCDENR form GW-22M, to each owner of property on which a monitoring well is proposed, requesting access for drilling and sampling activities and a response within a reasonable timeframe. In the event the property owner is non-responsive, or denies access, MACTEC will notify the NCDENR for assistance in obtaining access to drilling locations. These locations potentially could be modified prior to commencement of field activities based on the presence of utilities and obtaining landowner access. It is estimated that obtaining the necessary approvals from property owners will require up to two months. A completion date of May 8, 2009, for well installation, sampling, laboratory analyses, and reporting of analytical results therefore is anticipated, along with a proposal for completion of the Phase IB Site Assessment.

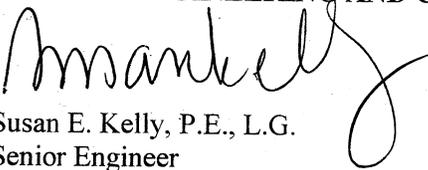
January 21, 2009

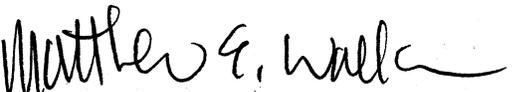
Investigative-derived waste generated during the installation and sampling of monitoring wells will be contained in impermeable basins and prepared for proper short-term on-site accumulation and off-site transport and disposal.

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

Sincerely,

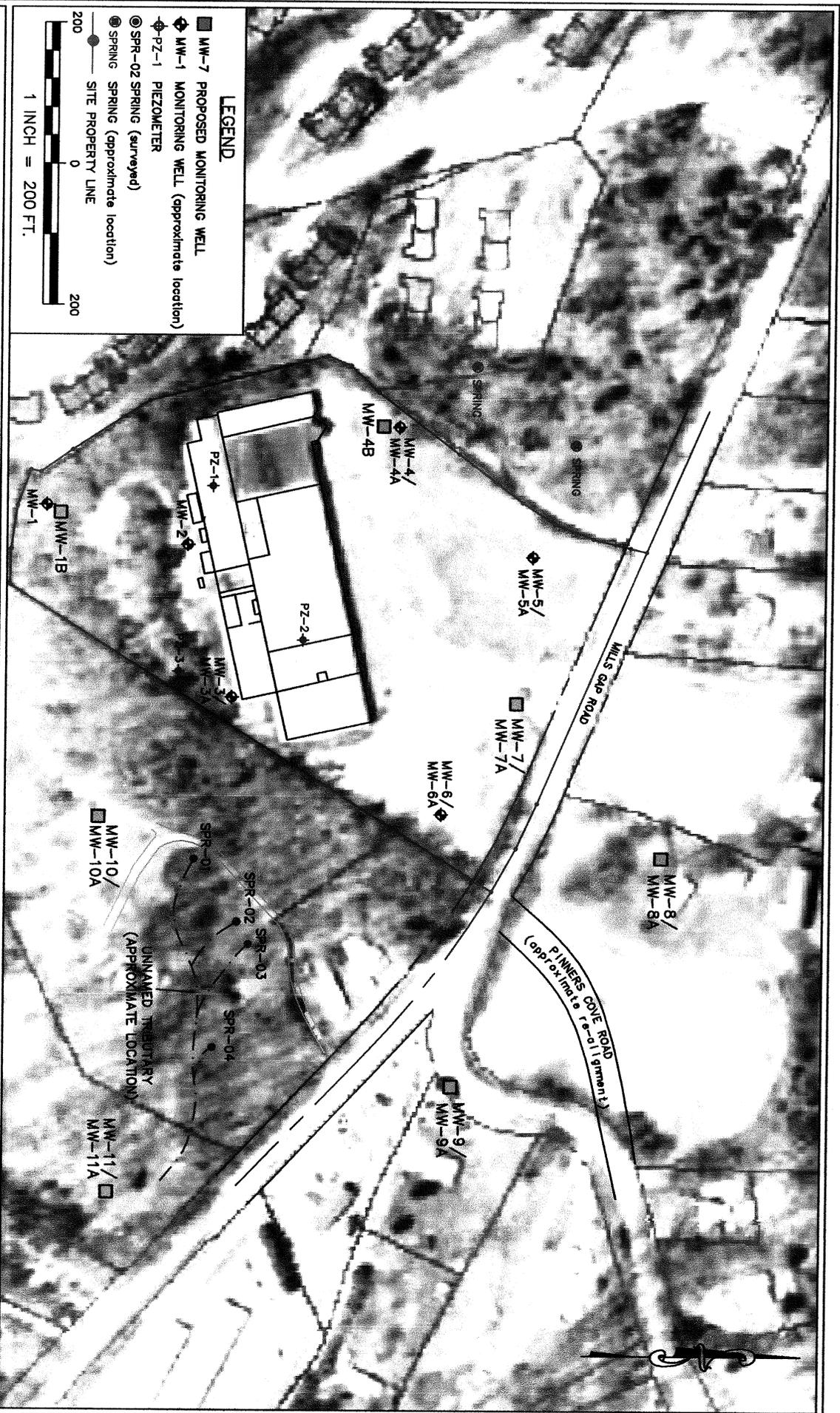
MACTEC ENGINEERING AND CONSULTING, INC.


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


Matthew E. Wallace, P.E.
Principal Engineer

SEK/MEW:sek

attachment: Figure 1 - Proposed Monitoring Well Location Map



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



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