LAW OFFICES

LEAKE, SCOTT & STOKES
501 BB&T BUILDING
ASHEVILLE, NORTH CAROLINA 28801
(828) 253-3661

LARRY LEAKE
WARD D. SCOTT
JAMIE A. STOKES

A.E. LEAKE
1911 -1992

MARSHALL OFFICE
P.O. BOX 451
MARSHALL, NC 28753
TELEPHONE (828) 649-3883

RECEIVED
DEC 28 2009
WASTE SECTION

December 22, 2009

Jaclynne Drummond
NCDENR
Division of Waste Management
1646 Mail Service Center
Raleigh, NC 27699-1646

Re: Your letter of November 23, 2009 addressed to Mr. Garrison re: PCE

Dear Ms. Drummond:

I have had an opportunity to review your November 23, 2009 letter and Madison County is in the process of developing a work plan.

Madison County has consulted with Altamont Environmental, Inc. and will be working with Joel D. Lenk, a licensed professional geologist.

The scope of work developed to this point is as follows:

Task 1: *Investigate Soil and Shallow Groundwater on Joel Edward's Property Using a Direct-Push Sampling Rig*

Soil and groundwater samples will be collected using a direct-push sampling rig. Continuous soil samples will be collected in new PVC sleeves driven into the ground surface using the direct-push rig and associated tooling. Continuous soil samples will be screened using an organic vapor analyzer (OVA), in an effort to determine if and where in the soil column the highest organic vapor concentrations are present. Continuous soil samples will be screened from the ground surface to the water table or rig refusal, whichever occurs first. In each boring, the one-foot interval showing the highest organic vapor reading will be placed in laboratory-supplied sample jars by a technician wearing new nitrile gloves. Samples will be placed on ice immediately after collection, and sent to the lab for analysis of Volatile Organic Compounds (VOC) by EPA method 8260 using low-level detection limits. Proper chain-of-custody documentation will be followed throughout the sampling process. In the event that the OVA readings are inconclusive, at least one soil sample will be collected from the vadose zone in each boring.

Groundwater samples will be collected from the water table aquifer using the direct-push sampling rig water sampler, polyethylene tubing, and a check valve. Groundwater samples will be placed in laboratory-supplied sample jars by a technician wearing new nitrile gloves. Samples will be place on ice immediately after collection and sent to the lab for analysis of Volatile Organic Compounds by EPA method 8260 using low-level detection limits. Proper chain-of-custody documentation will be followed throughout the sampling process. Groundwater samples will be analyzed for VOCs by EPA method 8260 using low-level detection limits.

Soil and groundwater samples will be collected from, but not limited to, the following locations:

- The area of subsidence immediately adjacent to the Edward's well
- The path of stormwater upslope of the Edwards' wellhead that ultimately flows over the well head
- The Edwards' septic field.

Following the installation of each boring and the collection of soil and groundwater samples using the direct-push rig, borings will be abandoned by installing neat cement grout in each boring using a tremie pipe.

Task 2: *Collect a Sample of Surface Water/Shallow Groundwater Entering the Well From Below the Surface Casing*

A surface water/shallow groundwater sample will be collected from within the Joel Edwards water supply well. This will be accomplished by removing the pump, discharge pipe, and wiring using a hoist rig. Subsequently, a decontaminated inflatable packer will be installed in the well at an elevation approximately 60 feet below the top of the surface casting. The packer will be inflated with nitrogen in order to seal the borehole. The water observed to be entering the well from beneath the surface casting, and from shallow fractures in bedrock between the bottom of the surface casting and 60 feet below the top casting, will be allowed to accumulate to a depth sufficient to collect a sample using a decontaminated stainless steel bladder pump. Water will be purged from above the reduction potential (ORP), dissolved oxygen, and temperature. During purging, these parameters will be measured and recorded approximately every three minutes. Well purging will continue until these parameters stabilize for three consecutive readings. The stabilization criteria are as follows:

- pH values within +/- 0.1 pH unit
- Specific conductivity values within +/- 3 percent
- Temperature, dissolved oxygen, and turbidity values within +/- 10 percent
- ORP values within +/- 10 millivolts

Once parameters have stabilized as described above, a technician wearing new nitrile gloves will place the water sample in laboratory-supplied sample jars, immediately place the sample on ice, and deliver the sample to a North Carolina certified laboratory. The water sample will be analyzed for VOCs by EPA method 8260 using low-level detection limits. Proper chain-of-custody documentation will be followed throughout sample collection.

Task 3: *Collect a Sample of Wood Mulch Adjacent to the Wellhead*

A sample of the wood mulch placed around the wellhead will be placed in a laboratory-supplied sample jar by a technician wearing new nitrile gloves. The mulch sample will be places on ice and delivered to the laboratory for analysis by EPA method 8260 using low-level detection limits. Proper chain-of-custody documentation will be followed throughout sample collection.

Task 4: *Collection Strike-and-Dip Measurements from Rock Outcropping in the Vicinity of the Edwards Property and the Closed Madison County Landfill.*

Strike-and-dip measurements will be collected and recorded from rock outcrops in the vicinity of the Edwards' residence and Madison County Landfill. This information will be gathered in order to better understand prominent fracture orientation and bedrock fabric in the area.

When you have an opportunity, please advise if this work plan is approved, or you request additional information or amendments before implementation.

With kindest regards, I am,

Sincerely,

Ward D Scott

Ward D. Scott

WDS:jrp