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July 15, 2010

Via Facsimile: (919) 733-4811 and
First Class Mail

Ms. Jaclynn Drummond
Compliance Hydrogeologist
N. C. Department of Environment and Natural Resources
Division of Waste Management – Solid Waste Section
1646 Mail Service Center
Raleigh, NC 27699-1646

Dear Ms. Drummond:

In an effort to better understand the intent and implication of your letter dated May 11, 2010, I, on behalf of Madison County as County Attorney, have requested that Altamont Environmental, inc., prepare the letter you will find attached/enclosed to this fax/cover letter.

If there is need of any clarification, or you desire to speak to me personally, please do not hesitate to contact me at the Asheville office listed above. My personal cell phone number is (828) 775-3756.

I look forward to working with you in this matter, and if you would be kind enough to direct further correspondence to Madison County to my attention, I would appreciate it.

With kindest regards, I am

Sincerely,

Ward D. Scott

WDS/jg
Enclosure

ALTAMONT ENVIRONMENTAL, INC.
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Transmitted to Mr. Ward Scott via hand delivery

June 30, 2010

Ms. Jaclynne Drummond
Compliance Hydrogeologist
NC Department of Environment and Natural Resources
Division of Waste Management—Solid Waste Section
1646 Mail Service Center
Raleigh, NC 27699-1646

Subject: Phased Assessment Plan and
Upgrade of Groundwater Monitoring Network
Closed Madison County Landfill, Permit #58-02

Dear Ms. Drummond,

Altamont Environmental, Inc. (Altamont) has prepared this letter on behalf of Madison County and the Madison County Solid Waste Department in response to your letter dated May 11, 2010, which addressed Madison County's *PCE Investigation Summary Report*.

Madison County and Altamont are currently preparing an assessment plan which will include proposed upgrades to the groundwater monitoring network as required by your May 11, 2010 letter.

Before submitting the proposed assessment plan to the Solid Waste Section (SWS) for review, Madison County would like to reiterate some facts regarding this site:

- In 2008, a residential water supply well was illegally drilled within 500 feet of the Madison County Closed Landfill (#58-02) on property owned by Mr. Joel and Dianne Edwards, by a driller that was apparently unaware of or chose to ignore current North Carolina well-construction regulations and the existence or location of the landfill.
- The location selected for the well by the driller is poor, and the surface casing for the well is inadequate. Specifically, the casing:
 - Is installed in approximately 20 feet of fill placed as the Edwards house seat
 - Only penetrates the natural ground surface several feet
 - Is not set into a bedrock socket
 - Was apparently broken during installation
 - Was apparently not grouted in place properly
- In the spring of 2007, Madison County volunteered to begin sampling groundwater in the well to protect the health of the Edwards family.
- Tetrachloroethene (PCE) was first detected in the well in the spring of 2009 at a concentration of 15.5 µg/L.
- The concentration of PCE has decreased since 2009 and was 0.6 µg/L in the most recent sampling event conducted by the Madison County Health Department.

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- Madison County has been proactive in efforts to assess the source and pathway of contamination, and to develop a plan to block the pathway for contamination to enter the well.
- PCE has not been historically detected in any water samples collected from monitoring wells or surface water at the landfill.
- Daughter compounds of PCE have not been detected in samples collected from the Edwards' well, which suggests that the source of PCE is relatively new.
- Packer testing and associated analytical data suggest that PCE has not impacted the main water bearing fracture of the Edwards' well; PCE appears to be entering the well from a shallow depth below the poorly installed surface casing.
- Other VOCs are known to exist in soils at the Edwards' residence.
- The concentration of PCE in the well has been generally decreasing since it was first detected at a concentration of 15 µg/L in the spring of 2009 and appears to diminish when the well is pumped significantly.
- The most recent detection of PCE in a sample collected from the Edwards' well on May 12, 2010 by the Madison County Health Department reveals that the current concentration of PCE in the well water is 0.6 µg/L, which is below the North Carolina 2L Standard for PCE of 0.7 µg/L.
- Madison County is a rural county with a small tax base. Madison County does not have the resources necessary to install an elaborate monitoring network beyond what is necessary to protect the health of the public and the environment.

This said, Madison County and Altamont are very interested in cooperating with you and the SWS to address the problem with the Edwards' well, and we do not deny that there is the potential for the Closed Madison County Landfill to be the source of PCE detected in the well. However, historic groundwater data and data collected over the past year suggests that the landfill may not be the source of the PCE found in the Edwards' well. The tenor of your letter implies that the landfill is the source of PCE in the Edwards' Well, that Madison County is guilty of contaminating the well, and that Madison County is responsible for increasing levels of contamination outside the landfill boundary despite the apparent lack evidence to suggest this possibility.

Despite the possibility that the Closed Madison County Landfill may not be the source of the PCE, Madison County is currently working with the Town of Marshall to develop a plan to provide the Edwards's with a municipal source of drinking water.

Based on the requirements stated in your May 11, 2010 letter, Madison County proposes installing one boring between covered landfill waste and the Edwards's well. If groundwater is encountered in unconsolidated material above competent bedrock in that boring, a shallow water table well will be installed with a screen that brackets the water table in this location. If a shallow water table well is installed above competent bedrock, a second boring will be installed immediately adjacent to the water table well. The second boring will be completed as a cased or telescoping well intended to intercept groundwater potentially moving through fractured rock toward the Edwards' well. A surface casing will be installed 10 feet below the elevation of competent rock. The surface casing will be grouted in place per North Carolina well-construction standards and allowed to cure for a period no less than 24 hours. Subsequently, a smaller diameter boring will be installed through the competent surface casing and checked for leakage. If the surface casing and seal are found to be competent, the boring will be extended to the approximate depth of landfill waste at the site. If water is not found in unconsolidated material in the initial boring, only the telescoping bedrock well will be installed to the depth of landfill waste. The well(s) will be, developed, purged and sampled within one week of installation and analyzed for all Appendix I detection monitoring analytes as required by SWS regulations. After the county receives the results of the analysis on the

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groundwater sample collected from the new well(s), Madison County and Altamont will contact the SWS to discuss whether additional assessment is necessary at the site.

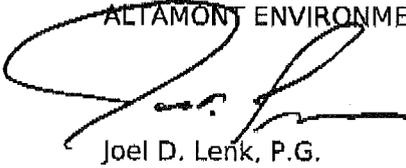
Madison County is requesting assurance that if PCE is not detected in new well(s), then Madison County will not be required to install additional wells to address the historical detections in the Edwards' well.

Madison County requests your opinion of the adequacy of this proposed approach and would appreciate any suggestions you might have regarding placement or construction of a monitoring well(s) near the location of the property line between the Edwards' property and the landfill parcel.

We appreciate your time and assistance on this project. Please direct any questions, concerns, or comments related to the report to Mr. Ward Scott and he will forward them to me.

Sincerely,

ALTAMONT ENVIRONMENTAL, INC.



Joel D. Lenk, P.G.

Cc: Mr. Steve Garrison, Madison County Manager
Mr. Jim Huff, Director Madison County Solid Waste Department
Mr. Ward Scott, Madison County Attorney