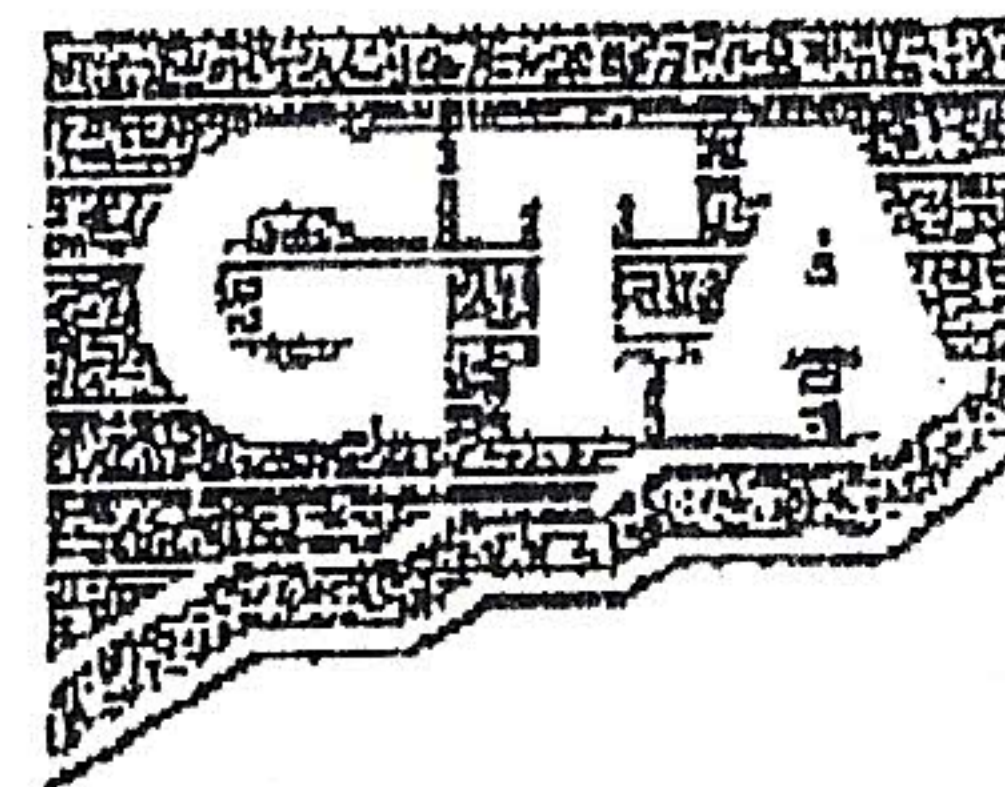


GEO-TECHNOLOGY ASSOCIATES, INC.

GEOTECHNICAL AND
ENVIRONMENTAL CONSULTANTS

A Practicing ASFE Member Firm



August 24, 2009

New Jersey Department of Environmental Protection
Division of Responsible Party Site Remediation
Bureau of Northern Field Operations
7 Ridgedale Avenue
Cedar Knolls, NJ 07927

Attn: Deborah R. Cowell, Case Manager

Re: Site Investigation Report Addendum
1237 Ringwood Avenue
Wanaque Borough
Passaic County, New Jersey
NJDEP Case #98-12-14-1014-37

Dear Ms. Cowell:

Geo-Technology Associates, Inc. (GTA) submits this *Site Investigation Report Addendum* for the above referenced property. The approximately 1-acre site is located at 1237 Ringwood Avenue (Block 448 Lots 16.01 and 16.02), in Wanaque Borough, Passaic County, New Jersey. On July 29, 2008, a *Preliminary Assessment & Site Investigation Report (PA/SI)* was submitted to the New Jersey Department of Environmental Protection (NJDEP; Department) on behalf of Pulte Lifestyle Communities, Inc. (Pulte), the current owner of the site.

The subject property currently contains an approximate 5,400-square foot, one-story commercial office building. Historically, the subject property was undeveloped until construction of a restaurant in the early 1950s. The site was purchased by Pulte from Mr. Chun Yip Cheng in December 2000. The restaurant was razed in 2001, and the existing office building was constructed in 2002.

In 1998, a Phase I Environmental Site Assessment (ESA) and Phase II Site Investigation were performed by others. At that time, the solvent trichloroethene (TCE) was detected in groundwater at the site above the New Jersey Class II-A Groundwater Quality Standards (GWIIA). The groundwater contamination was reported to NJDEP and the site was assigned Case #98-12-14-1014-37. A Memorandum of Agreement (MOA), and a DRAFT Phase I ESA and Phase II Site Investigation, were submitted to the Department in 1999 on behalf of the former property owner, Mr. Chun Yip Cheng. In a letter dated June 11, 2001, the Department found the draft report to be technically and administratively deficient. Pulte did not know about the site environmental history until a potential site buyer started a due diligence process in 2007.

24 Worlds Fair Drive, Suite B, Somerset, NJ 08873

(732) 271-9301

Fax: (732) 271-9306

+ Abingdon, MD + Laurel, MD + Frederick, MD + Waldorf, MD + Sterling, VA + Somerset, NJ
+ New Castle, DE + Georgetown, DE + York, PA + Quakertown, PA + Charlotte, NC

Visit us on the web at www.nragta.com

The chlorinated solvent groundwater contamination previously detected by others was identified as an area of concern (AOC) at the site. Accordingly, GTA performed a background groundwater investigation at the site in general accordance with the *New Jersey Technical Requirements for Site Remediation* (N.J.A.C. 7:26E). The background groundwater investigation included a PA to evaluate potential on-site sources. In March 2008, GTA performed soil sampling near a former drum location and soil analytical results were below the applicable criteria.

In March 2008, GTA installed four monitoring wells on portions of the site where chlorinated solvents were previously detected by others, near the former drum area, and on portions of the site near the suspected off-site source of chlorinated solvents. GTA collected groundwater samples from the wells in April 2008 and groundwater analytical results were below the GWIA, except vinyl chloride was detected in one well (MW-3) at a concentration of 1.1 µg/l, marginally above the GWIA for vinyl chloride of 1 µg/l.

GTA reviewed available NJDEP records for the northwestern adjoining General Ceramics site, at which sources of vinyl chloride, TCE, and other solvents have been identified. Specifically, vinyl chloride has been detected in groundwater at the General Ceramics site at concentrations up to 8,400 µg/l, compared to 1.1 µg/l at the subject site (1237 Ringwood Avenue). Based on available groundwater flow information, the vinyl chloride source area at General Ceramics is upgradient of the subject site. GTA requested a No Further Action (NFA) approval for the subject site given:

- The absence of an on-site source;
- Groundwater quality data is compliant except for one reading being marginally above the applicable criterion, and its being attributed to a *significant* upgradient off-site source (General Ceramics);
- Documented groundwater flow direction; and
- Soil analytical results being below the applicable criteria.

The Department issued a *Notice of Deficiency* dated May 20, 2009 in which it was stated that the background groundwater investigation did not support a position that the presence of a groundwater contaminant in excess of the applicable remediation standard was due to background groundwater contamination. On June 10, 2009, Mr. Ed Israelow of Pulte and I met with you and Mr. Gary Greulich to discuss the project. The Department agreed at that time that an NFA approval would be issued if GTA resampled MW-3 and the average contaminant concentration for vinyl chloride for the two rounds of sampling did not exceed the GWIA.

On June 24, 2009, GTA re-sampled MW-3 for vinyl chloride. The well location is shown on the attached *Monitoring Well Location Plan*. Prior to sampling, GTA personnel purged approximately four well volumes from the monitoring well using a peristaltic pump and dedicated, disposable tubing. Groundwater samples were retrieved from MW-3 using a dedicated, disposable bailer lowered to the groundwater interface. Groundwater samples were collected with proper attention to quality assurance protocols, conforming to the guidelines and requirements set forth by NJDEP in the *Field Sampling Procedures Manual*, November 2005. A *Groundwater Sampling Data Sheet* is attached.

