The New Jersey Department of Environmental Protection (DEP) has contracted the Louis Berger Group, Inc. to perform a Remedial Investigation (RI) of the soil and groundwater in the vicinity of the former Lawrence Road Service Center (Site) in Lawrence Township.

**Site History**

Historically, the Lawrence Road Service Center property, located at 1175 Lawrence Road (Block 1308, Lots 2, 3 and 4), was a gasoline and service station formerly known as the Pit Stop Service Center and later known as the Lawrence Road Service Center. Between 1997 and 1998, the NJDEP environmental spill hotline was notified three times of discharges occurring at the Site. In 1997 the NJDEP ordered the owner of the property to stop selling gasoline from the Site. The Site continued to operate as an automobile repair facility until 2003.

In early 2003, after neighborhood residents complained of odors in their drinking (home well) water, Lawrence Township sampled 13 residential potable wells near the Site. Methyl-t-butyl ether (MTBE), a gasoline additive, was detected in the water samples collected from five of the residential properties. The MTBE results were between non-detect and 1400 parts per billion (ppb); the groundwater quality standard for MTBE is 70 ppb. The five residences were subsequently connected to a municipal water supply line, and the potable wells were abandoned in 2004. In November 2008, six of the remaining potable wells were sampled for Volatile Organic Compounds (VOCs) and the results indicated no exceedances. The full extent of the soil and groundwater contamination is currently unknown.

In March 2006 seven Underground Storage Tanks (USTs), which may have been a source of the groundwater contamination, and 2,000 tons of petroleum-impacted soil were removed from the Site. The previous investigations also included the installation of five monitoring wells located on the Lawrence Road Service Center Property.

**Remedial Investigation (RI)**

Through previous investigations, the extents of the groundwater and soil contamination at and near the Site have been partially characterized.

The primary objectives of this RI include:

- Confirm and delineate the source(s) of contamination;
- Characterize geologic conditions;
- Characterize shallow and deep groundwater flow directions;
- Assess groundwater quality and delineate the extent of groundwater contamination (shallow and deep);
- Identify potential contaminant impacts to surrounding surface water; and
- Evaluate potential effects to human receptors and natural ecological resources.
Field Activities

A comprehensive assessment of the five existing onsite monitoring wells will be conducted, and based on the conditions each will be repaired or abandoned as necessary. An initial round of groundwater samples will be collected for volatile organic compounds (VOCs), methyl-t-butyl ether (MTBE) and tert-butyl alcohol (TBA) from wells that are determined to be in competent condition. Select VOCs and MTBE and TBA are all gasoline constituents.

An onsite soil investigation will consist of approximately 25 soil boring locations to investigate and delineate onsite soil contamination. Soil samples will be collected from each of the locations and the samples will be analyzed for VOCs, semi-volatile organic compounds (SVOCs), polychlorinated bi-phenyls (PCBs), metals and total petroleum hydrocarbons (TPH).

A groundwater investigation will be performed in an effort to characterize groundwater and to delineate the contaminated groundwater plume. The investigation will consist of the installation of monitoring wells off-site and groundwater sampling and analysis.

The monitoring well installation task will initially consist of the installation of six shallow and deep monitoring well pairs which are proposed throughout the surrounding area. Prior to completion of the wells, the deep bedrock boreholes will be geophysically inspected for water bearing fractures and certain fracture zones will be sampled for VOCs. Based on the sampling results of the six initial well pairs, up to 10 additional well pairs may be installed to gain horizontal and vertical delineation.

After 14 days, the first of two monitoring well sampling events will be completed after the installation and completion of the wells. The second will be completed approximately 60 days after completion of the first. To address the possibility that the contaminated groundwater plume has reached Shabakunk Creek, three stream gauges will be installed and surveyed, and surface water and sediment samples will be collected at the three locations. Groundwater, surface water and sediment samples will be analyzed for VOCs, MTBE, and TBA.

The Louis Berger Group will prepare a Remedial Investigation Report describing site activities and sampling results. The DEP will review the report and upon approval the report will be made available to the public.

Online resource for information about contaminants may include information from the U.S. Environmental Protection Agency at Http://www.epa.gov/superfund/health/index.htm. and/or the U.S. Agency for Toxic Substances and Disease Registry at http://www.atsdr.cdc.gov/toxfaq.html.

For additional information please contact
Mindy Mumford, NJDEP
(609) 777-1976
mindy.mumford@dep.state.nj.us
or
Gary Lipsius, NJDEP
(609) 984-0955
Gary.lipsius@dep.state.nj.us