

ENVIRONMENTAL NEWS

APRIL 2004

INSIDE THIS ISSUE:

ENVIRONMENTAL AUDITS AND BROWNFIELDS 1

EMERGENCY RESPONSE 2

ENFORCEMENT PENALTIES 3

LOWER LAB RATES 3

TERMINOLOGY 3

PILOT TESTING 4

SPECIAL POINTS OF INTEREST:

- **January 2004 civil penalties for non-compliance total \$100,000**
- **Be prepared for emergency response**
- **Lower laboratory rates will save Trust Fund significant amount of money**

ENVIRONMENTAL AUDITS AND BROWNFIELDS

It happens. We have seen it numerous times. A property buyer has their sights on a piece of property that would be perfect for their new widget factory. It's an old warehouse in an industrial part of town, but the price is right, the seller is motivated, and the buyer needs to start making widgets. The deal closes. A month down the road, the buyer is grading the property and uncovers three orphaned USTs and contaminated soil in addition to what seems to be an area where the previous property owners buried a variety of trash and manufacturing by-products 50 years earlier. Pass the Goody's, get out the check book, and start cleaning it up.

It is an unfortunate situation that could have been prevented had the buyer conducted an environmental audit of the property prior to closing. Completing an audit would have identified the former uses of the property that in turn would have warranted a soil and groundwater investigation be completed. Therefore, the USTs and the buried waste would have been the seller's

problem and not the buyer's. At that point, the buyer could walk away and move to greener pastures or use this as a tax savings situation. Yes, having contamination on a prospective property could work to your benefit. The key word is "Brownfields." I know we have had previous articles on the subject, but TerraQuest's recent involvement in a Brownfields site in Carrboro, NC has really convinced us that this process is beneficial for all the parties involved, the buyer, the seller, the municipality, the community, and the environment.

The buyer gets to write off the environmental expenses, has a limited liability concerning the assessment and cleanup of the contamination, and does not have to pay the full property tax bill for the property and any improvements for FIVE years! The seller gets to unload a piece of property he had no interest in. The municipality, after the five year reduced tax period, receives increased tax revenue on a revitalized property. The community has an eyesore transformed into a

viable job-generating industry. The environment is protected from future impacts potentially caused by contamination. While they are not for every prospective developer and sometimes require a significant capital investment, Brownfields are win-win situations for all of the parties involved.

So when you are in the market for properties to expand your business, remember to take an inexpensive but crucial step—the environmental audit. It could save you a lot of money and heartburn.



Free product floating on water recovered from a monitoring well

EMERGENCY RESPONSE

On March 19, 2004, TerraQuest received a call regarding the presence of gasoline in a sanitary sewer line. Within four hours, TerraQuest personnel were onsite assessing the situation. Initial assessment activities consisted of meeting with local and state officials to discuss the situation and determine an appropriate course of action to abate the release, identify the source of the release, and to begin product recovery. Later in the day, Shamrock Environmental Corporation arrived onsite to setup free product recovery equipment. TerraQuest has

an emergency response contract with Shamrock to assist us in the cleanup of releases.

On the following day, TerraQuest personnel installed two groundwater monitoring wells to locate the source of the free product and installed soil borings near the sanitary sewer line.

Superior Services, a tank compliance testing company from Hendersonville, NC, performed a helium test on the suspected leaking tank system to pinpoint the release area.

Once free product was de-

tected in one of the monitoring wells, free product efforts began by Shamrock. To date, over 700 gallons of free product have been recovered and there has not been any

further occurrence of gasoline in the sanitary sewer. If you would like information on how to contact TerraQuest during emergencies, please let us know and the information will be sent to you.



Helium testing of the tank system (top); Shamrock Environmental product recovery equipment (above); TerraQuest Geoprobe preparing to install monitoring wells (left).

Shamrock Environmental maintains an extensive fleet of equipment for all types of emergency response situations. Their most recent additions include three mobile groundwater treatment systems. These systems, also known as mobile multi-phase extraction (MMPE) systems, are able to recover free prod-

uct and contaminated groundwater. The systems are completely mobile and can begin recovery operations within a few hours of arrival onsite. Recovered liquid is stored in a tanker that is later transported off-site for disposal. The use of MMPE has proven effective in recovering both free prod-

uct and contaminated groundwater while reducing costs. Since the systems are mobile, the cost of designing and installing expensive fixed remediation equipment is avoided. If you would like additional information regarding this service, please contact us.



Diesel generator for MMPE unit

DIVISION OF WASTE MANAGEMENT ENFORCEMENT

In an effort to increase compliance, the Division of Waste Management is increasing enforcement actions and compliance inspections. Additional personnel have been added to perform routine compliance audits of underground storage tank systems. Inspections include verifying proper operation of leak detection equipment including cathodic protection systems.

To show their stricter stance on non-compliance, civil penalties have been increased. During the month of January, the Division of Waste Management assessed approximately \$100,000 in civil penalties for a variety of offenses ranging from placing fuel in unregistered tanks to failure to complete assessments. The strictest penalty was \$18,193 for failure to complete an assessment.

Tank owners should conduct periodic visual inspections of tank system components in addition to any automatic leak detection equipment. Seals on spill basins should be inspected at least every six months, and any accumulated liquids removed to prevent deterioration of seals.



Leaking Product Line

LOWER ANALYTICAL COSTS

In an effort to further ensure the solvency of the Leaking Underground Storage Tank Trust Fund, lower analytical rates will become effective on May 1, 2004. Some of the analytical rates have been reduced by 50% or more. The Trust Fund used analytical rates from bid documents to set the new rates. A similar process was used last year to derive the most current version of the

Reasonable Rate document (RRD).

It is anticipated that some laboratories will likely have a difficult time complying with the new rates. TerraQuest has reviewed the situation with our laboratory and they will set their rates in accordance with the new RRD.

Combined with other recent changes by the Division of Waste Management, the

reduced analytical rates should help reduce the current turnaround time on reimbursements.

If you should have any questions regarding the new rates or Trust Fund policies, please feel free to contact us. Jill Ballentine is our Trust Fund Specialist and can answer all of your questions.

TERMINOLOGY

Have you received an NORR from the NCDWM-UST requesting an MMPE, LSA, CSA, or CAP once you complete a PAF? While some may know exactly what the state is requesting, we want to make sure everyone understands. Therefore, we will periodically cover the terms. As always, please contact us if you need

additional information or would like us to give you a presentation.

Some of the more commonly used acronyms are:

LSA Limited Site Assessment; consists of the installation of one to five monitoring wells to gather preliminary information on a release.

CSA Comprehensive Site Assessment; a more detailed assessment of soil and/or groundwater to define the extent of contamination.

PAF Pre-Approval Form; a form used to request pre-approval of costs. A PAF is necessary for certain activities and all activities after the completion of the CSA.



www.terraquestpc.com

**TERRAQUEST ENVIRONMENTAL
CONSULTANTS, P.C.**

401 W. Weaver Street
Carrboro, NC 27510

Phone: 919-932-1590

Fax: 919-932-1594

Email: mjbrown@terraquestpc.com



**YOUR SOURCE FOR ENVIRONMENTAL
SOLUTIONS.**

TerraQuest Environmental Consultants, P.C. is a full service environmental consulting firm located in Carrboro, NC. We specialize in the assessment and remediation of various types of facilities.

If you have questions regarding our services, please feel free to contact us at (919) 932-1590 or visit our website at www.terraquestpc.com

PILOT TESTING FOR BETTER SITE REMEDIATION

What is a pilot test and why is it conducted? First, there are a variety of pilot tests and they are conducted for various reasons. Generally, they are conducted to determine various site specific properties that are needed to better design remediation systems.

The most common types of pilot tests are aquifer tests, soil vapor extraction tests, and air sparging tests. During an aquifer test, groundwater is extracted and the rate of drawdown and radius of influence is determined so that groundwater extraction

points can be better located. Soil vapor extraction tests are similar except that air is removed from the vadose zone to test the effectiveness of in situ soil treatment. Information is also gathered that will allow the equipment to be sized properly.

During an air sparging test, air is injected into the aquifer and various parameters are measured such as dissolved oxygen concentrations and groundwater mounding. This information is used similarly to size equipment and determine the spacing of injection

points. Without pilot testing, the design and subsequent performance of a remediation system can be questionable.

John Hayes supervises a groundwater pumping test

