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# THINK



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## Owner and Operator Orientation Sessions

by Mick Butler

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The Underground Storage Tank Branch would like to announce a new service to UST owners and operators. UST orientation sessions can now be scheduled at the 391 Lukens Drive Office. This service will focus on introducing new UST owners and operators to the requirements of Delaware's *Regulations Governing Underground Storage Tank Systems* and of *Delaware's Vapor Recovery Regulations*. Individualized sessions will run about one hour. To schedule a date and time call 302-395-2500 and ask to speak to the UST Group person of the day.

The Underground Storage Tank Branch hopes that these compliance assistance ses-

sions will result in an increased awareness for new owners and new operators of the importance of full compliance with the regulations. You are encouraged to bring a list of the UST records you currently maintain so they can be revised for compliance issues.

In addition, when these new owners and new operators are inspected by the Department, they will have a better chance of getting through the inspection without a single violation. No violations or full compliance will save everyone involved both time and money. And that's something we all want.

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## 1998 Compliance Listings

*Think Tank* last published compliance listings in issue #26 published in the Summer of 1998. At that time, the Department listed 319 facilities already in compliance with the '98 deadline. In December of 1998 all owners of USTs that, according to our records would not be in compliance with the December 22, 1998 compliance deadline for corrosion protection were sent a certified letter. The letter was also sent to all UST owners whose information on file with the Department indicated violations of spill containment, or overfill protection.

Our records show that *every tank* at the 497 facilities listed on the insert is in compli-

ance with corrosion protection, spill protection, and overfill protection. **Congratulations!**

Those facilities not listed have one or more tanks out of compliance or may have come into compliance after June 1, when this list was generated. Enforcement activities are presently being directed at those facilities which are out of compliance and not under a Settlement Agreement with the Department.

Another way to look at it is 74% of all regulated tanks in Delaware are in compliance. This is equal to the national compliance rate.

## UST Branch Profile:

# Pat Ellis

**D**r. Patricia M. Ellis came to DNREC's UST Branch in May, 1990 as a Hydrologist I and project officer and is currently a Hydrologist IV in the Leaking Underground Storage Tank (LUST) Group. Prior to coming to Delaware, Pat was a research geologist for 5 years at Conoco working out of Ponca City, Oklahoma and then Denver, Colorado. Her projects were split between technical service projects for various Conoco regional offices, training, and pure research. Her specialty is the formation of oil reservoirs in carbonate rocks. Her training responsibilities included training other Conoco geologists and geophysicists in how to find oil in carbonate rocks. This led her to organize rock climbing trips in Texas, as well as diving and snorkeling trips in Florida, the Bahamas and Indonesia 2 to 3 times a year. Her fondest experiences are of diving in Indonesia in the most beautiful coral reefs in the world in bathtub temperatures! She also claims credit for striking oil in the wilds of Irian Jaya, Indonesia. Prior to Conoco, Pat worked for the Texas Bureau of Economic Geology and various teaching assistantships.

Pat came to the UST Branch at DNREC after spending a few years as a full time mom. Since coming to the UST Branch as a LUST project officer, she has managed the cleanup of over 500 LUST sites. She is also in charge of the LUST database and has served on various Division and Department committees including the information resources management workgroup and the Hydrologist promotion standards development committee.

In 1991, Pat noticed a new compound in gasoline that some major oil companies began including

in their monitoring reports. This compound is MTBE or methyl tertiary-butyl ether. This was a compound unfamiliar to Pat and other DNREC hydrologists overseeing clean ups of petroleum releases from USTs. Pat's intellectual curiosity led her to learn as much as possible of the what, where, how and why's of MTBE. Information on MTBE in the early 1990's was very sparse, but Pat was determined and successful in gathering whatever information, published and unpublished, was available on MTBE. This search led to the Delaware UST program's early alert to other states and UST owners, operators and contractors of the potential unique problems of MTBE as an additive to reformulated gasoline. Her early efforts resulted in a series of four *Think Tank* articles published around 1995. These articles received national attention. As a result a major article under Pat's byline was published by the national publication *LUSTline*. She has since been invited to speak before several groups at national UST/LUST conferences and meetings and has authored another follow-up article for *LUSTline*. As a result of Pat's efforts she is now nationally recognized as an MTBE expert.

Currently, Pat is co-editing the nationally distributed MTBE News-letter sponsored by ASTSWMO and EPA. See their web site at [www.astswmo.org/publications/bookshelf](http://www.astswmo.org/publications/bookshelf) for copies. Earlier this year, Pat was appointed to EPA's Blue Ribbon Panel on MTBE and Other Oxygenates in Gasoline as the states' representative on a panel of industrialists, scientists, and government officials. EPA created this panel to gain a better under-



standing of the public health concerns raised by the discovery of the chemical in some water supplies and to review the use of MTBE and other oxygenates in gasoline. The final recommendation of the Blue Ribbon Panel is due this summer.

A native of Rochester, New York, she received a B. A. in geology from the University of Rochester, an M. A. in geology from Duke University and a Ph.D. from the University of Texas at Austin. She met her husband David, an Environmental Fellow for DuPont, while they both worked at Conoco. Along with husband David, she resides in northern New Castle County with daughter Katie age 14, son John age 11, two cats, Pilot and Tiger, two birds, Rocky a Noble Macaw and Tequila a Sun Conure, and assorted fresh and salt water fish. In her spare time, when she is not chauffeuring her very active children to their various interests and activities, Pat pursues one of her other interests, quilting. She has completed and exhibited many originally designed quilts. An affirmed chocoholic, as her office mates will quickly attest, she also enjoys gardening, reading murder mysteries, and collecting rocks (a.k.a. mineral specimens.)

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## Odds 'N Ends

### **North Carolina:**

The following is a true story taken from a request for state-lead cleanup assistance, about how an underground storage tank was located and checked for contents. This is an example of how some sectors of the public continue to be uneducated regarding the hazardous situations related to underground storage tanks.

Mr. Gumpler said he discovered the tank on October 17, 1998, when a hole appeared in his dirt driveway and it was giving off bad odors.

There was no indication at the surface of there ever being a tank located at this site until the UST started to collapse. Mr. Gumpler told me that he was inside a few days after they noticed the tank and he heard a loud noise. He ran outside and discovered dirt had been blown on his trailer and the cars. He learned that his cousin lit a match to look down in the hole in the UST. He said his cousin told him he saw a flash so he started running. That is when the vapors in the tank ignited and blew out the fill port hole in the tank.

No injuries were reported as a result of the explosion.

### **Piping Replacement Program:**

Beginning at least as early as 1995 Total Containment, Inc. (TCI) began notifying its customers of possible gradual degradation of the primary (inner) pipe that is a component in Enviroflex<sup>®</sup> System manufactured for Total Containment by Dayco Products, Inc. before September 30, 1994. The cause of the degradation is a microbial fungus. This problem has resulted in isolated instances of leaks from the primary pipe, most of which have been contained by the Enviroflex second-

ary containment system. However, in order to avoid the possibility of a product spill, TCI requested that its direct customers provide to it the names and locations of all end users of this pipe. Using this information, TCI has conducted site inspections to confirm the existence of this pipe and to insure that it was replaced with new inner pipe that does not experience degradation.

To date, TCI has inspected the 10 Delaware locations that were reported and made sure that pipe was replaced at all sites where the subject pipe was found to exist. TCI is again notifying its customers that they should report any site locations not previously reported so that appropriate action can be taken. At present, no service charge is applied for a site inspection whether the piping in question is found or not. After July 15, 1999 the piping will be replaced at no charge, but a standard service charge will be applied if, after a site inspection, it is determined that the subject pipe is not present.

If you believe that you may have this piping in place at your facility please contact Erin Glennon at the UST Branch or call Dawn Wattel at American Containment, Inc., a subsidiary of Total Containment, Inc. at (800) 555-6785.

### **DERBCAP Update...**

Delaware's Risk-Based Corrective Action Program (DERBCAP) for underground storage tanks has been required for all new tank removals or abandonments since March 30, when a public education Workshop on DERBCAP concepts and procedures was presented to the regulated community at the

University of Delaware. Since then, the response from the regulated community has been overwhelmingly positive.

Responsible Parties and consultants alike approve of DERBCAP's quantitative approach to site assessments and being able to see the end of investigation and remediation, where they are required, rather than becoming entangled in prolonged monitoring as was often the case under the previous qualitative approach.

Feedback will continue to be solicited and appropriate adjustments to DERBCAP made through the remainder of 1999, after which this quantified, risk-based procedure will be finalized for inclusion in the third edition of the UST Branch's *Technical Guidance Manual*.

### **Useful WEB Sites:**

[www.dnrec.state.de.us](http://www.dnrec.state.de.us) — Department of Natural Resources and Environmental Control homepage

[www.epa.gov/swerust1/](http://www.epa.gov/swerust1/) — EPA homepage for USTs.

[www.epa.gov/swerust1/mtbe](http://www.epa.gov/swerust1/mtbe) — EPA links to MTBE information.

[www.epa.gov/swerust1/rbdl/index.htm](http://www.epa.gov/swerust1/rbdl/index.htm) — Risk-Based Decision Making process and information.

[www.udel.edu/dgs](http://www.udel.edu/dgs) — Delaware Geological Survey homepage with links to related sites.

[www.monumental.com/rshorne/3dem.html](http://www.monumental.com/rshorne/3dem.html) — Produces terrain visualization and flyby animation from many freely available sources.

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## Announcements

New Hires:

*Peter Rollo* - Environmental Engineer II

Peter will be responsible for the Vapor Recovery program permitting and compliance as well as plan review for new tank installations.

He comes to us from an Engineering and Consulting firm in New Jersey.

*Pat Walker* - Seasonal

Pat will be assisting in a filing project to assure that our computer files reflect what is in our paper files and that all items are correctly filed. This is in preparation for making them available on our web site.

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