S. HRG. 107–953

UNDERGROUND STORAGE TANK COMPLIANCE ACT

HEARINGS

BEFORE THE

SUBCOMMITTEE ON SUPERFUND, TOXICS, RISK, AND WASTE MANAGEMENT

AND THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS UNITED STATES SENATE

ONE HUNDRED SEVENTH CONGRESS

SECOND SESSION

ON

S. 1850

A BILL TO AMEND THE SOLID WASTE DISPOSAL ACT TO BRING UNDERGROUND STORAGE TANKS INTO COMPLIANCE WITH SUBTITLE I OF THAT ACT, TO PROMOTE CLEANUP OF LEAKING UNDERGROUND STORAGE TANKS, TO PROVIDE SUFFICIENT RESOURCES FOR SUCH COMPLIANCE AND CLEANUP

FEBRUARY 25, 2002—PASCOAG, RI
MAY 8, 2002

Printed for the use of the Committee on Environment and Public Works

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[1]Senator Campbell resigned from the committee on April 23, 2002.
[2]Pursuant to S. Res. 251, Senator Domenici was appointed to the committee on April 23, 2003.

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UNDERGROUND STORAGE TANK COMPLIANCE ACT

MONDAY, FEBRUARY 25, 2002

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
Pascoag, RI.

The committee met, pursuant to notice, at 9:30 a.m. at the Pascoag Utility District Maintenance Garage, 253 Pascoag Main Street, Pascoag, RI, Hon. Lincoln Chafee (acting chairman of the committee) presiding.

Present: Senator Lincoln Chafee.

Also present: Senator Jack Reed and Representative Patrick Kennedy.

OPENING STATEMENT OF HON. LINCOLN CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Senator CHAFEE. Good morning, everybody. Thank you very much for coming. I'm Senator Lincoln Chafee. With me today are Senator Jack Reed and Representative Patrick Kennedy. This is a hearing of the Environment and Public Works Committee, and it is now in order.

Each of us at this table will give opening statements and then we'll take testimony from two panels. I encourage everybody here, to use the forms in the back of the room. Any thoughts that you have on how we can improve the legislation, fill out the forms and take your testimony for the Environment and Public Works Committee. The format this morning is to hear from the witnesses that have been designated. We do encourage very much additional testimony from everybody here, and certainly in between the panels and afterwards, we look forward to sharing your thoughts. Your written testimony would go to the committee down in Washington.

I would also like to welcome Wally Lees, the town council president. Thank you, Council President Lees. Bill Andrews and Ed Bonczack are here also from the town council. Thank you very much for all your hard work all fall. You earn your money in these type of situations. Al Palmisciano, the chair of the Water District, is that correct? Ann Polachek, Walter Choiniere and Bill Mageaw, if I pronounced this right.

Scott Rabideau is here, also. He's going to testify. State Representative Scott Rabideau, Town Manager Mike Wood and Town Solicitor Walter Kane, thank you, also, for all your hard work over the past fall. We look forward to working with you as we go forward.

The Senate Environment and Public Works Committee is conducting today's field hearing to examine issues surrounding leaking underground storage tanks and the damage they can cause to communities. This hearing will also focus on the Underground Storage Tank Compliance Act of 2001, which I introduced in December. Anyone who's followed the situation in the Pascoag will understand the severe consequences when underground storage tanks leak and go undetected.

It is my hope that your experiences will help foster policy changes that prevent this type of crisis from occurring again.

People affected by the gasoline additive known as "MTBE" frequently ask how it reached their water systems.

In 1990, Congress passed a law to require that gasoline be mixed with additives to make it burn more cleanly. This reformulated gasoline is used in areas that do not meet clean air standards. MTBE was the most common additive. Although it made significant improvements to our air, we learned the hard way about the devastating effects it can have on groundwater if gasoline tanks leak.

We briefly discussed actions that the Federal Government has taken to address underground storage tanks.

In 1984, well before MTBE, Congress enacted a comprehensive program to address the problem of leaking tanks. This was a reaction to discover underground, or groundwater contamination in different parts of the country and its leakage from underground tanks. In fact, Rhode Island played a leading role in formulating that debate, and in 1983, a 60 Minutes report about leaking tanks in Canob Park in Richmond increased the nation's awareness about this widespread problem. Rhode Island has a dubious distinction in this arena.

A 1984 law imposed minimum Federal requirements for leak detection in prevention standards for underground tanks, and then in 1988, owners and operators of existing tank systems were given 10 years to upgrade the place of closed tanks that didn't meet minimum Federal requirements.

When the deadline passed 10 years later, in 1998, many underground storage tanks still failed to meet the Federal standards to prevent spillage, over-filling and corrosion.

As a ranking member of the Subcommittee on Superfund, Toxics, Risk Based Management, I was concerned about the potential problems regarding tanks. To assess this situation, I asked the General Accounting Office to examine compliance of tanks with Federal requirements.

Last May, the GAO concluded that approximately 76,000 tanks have never been upgraded to meet minimum Federal standards.

In addition, GAO found that more than 200,000 tanks have not been operated and maintained properly. GAO said that infrequent tank inspections and limited funding are among the contributing factors. The GAO report is back on the back table and it's a superlative report, which I encourage everybody here to pick up and read. In order to assist communities that grapple with these problems and to prevent such problems from reoccurring, I introduced the Bipartisan Underground Storage Tank Compliance Act. It requires inspection of all underground storage tanks every 2 years

and for the first time focuses on the training of tank operators. It simply does not make sense to install modern protective equipment if the people who operate them do so improperly, and that's usually leak detection devices, that when the buzzer goes off. The 18-year-old operator turns off the buzzer because he hasn't been trained on what to do. The bill also provides the Federal Government and States to improve necessary, to ensure that all parties are meeting Federal standards. Very importantly, this bill gives EPA the authority to prohibit delivery of fuel to tanks that are not in compliance. Very, very important. The existing legislation doesn't have that component. Prohibit the delivery of fuel. If that's not a stick to get compliance, then nothing is. It also provides $200 million to clean up the sites contaminated by MTBE.

While my bill solely addresses the tank situation, there is a separate effort ongoing in Congress which I support to permanently ban the use of MTBE gasoline. Last September, I voted for a bill on the Environment and Public Works Committee to ban the use of MTBE while maintaining clean air benefits that it has provided.

My underground storage bank bill was independent from that effort, because even if we get MTBE out of the gasoline, we still must fix the tanks so that ordinary gasoline does not spill in the environment.

We're looking forward to the testimony of our witnesses and grateful that the town has been proactive and willing to share its problems in order to promote solutions.

There is a model for solving our problems, and I will assure that will bring your experiences in place back to our Nation's Capitol as we continue to finance these depressing problems.

The Canob Park story in 1983 opened our eyes to the problem in the beginning, but the MTBE crisis in Pascoag has taught us that our work is not done.

I, once again, encourage all to submit any kind of written testimony after today's hearing is done.

[The prepared statement of Senator Chafee follows:]

STATEMENT OF HON. LINCOLN D. CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Good morning. The Senate Environment and Public Works Committee is conducting today's field hearing to examine issues surrounding leaking underground storage tanks and the impact that they have on communities. This hearing will also focus on the Underground Storage Tank Compliance Act of 2001, which I introduced in December. Anyone who has followed the situation in Pascoag will understand the severe impacts that can occur when underground storage tanks leak and go undetected. While we are working at the Federal, State, and local levels to bring assistance to you, it is my hope that your experiences will help foster policy changes that will prevent this type of crisis from reoccurring.

People affected by the gasoline additive known as MTBE frequently ask how it reached their water systems. In 1990, Congress passed a law to require that gasoline be mixed with additives to make it burn more cleanly. This reformulated gasoline is used in areas that do not meet clean air standards. In the Northeast, MTBE was the most common additive. While it made significant improvements to our air, we learned the hard way about the devastating effects it can have on groundwater if gasoline storage tanks leak.

Let me briefly discuss the actions that the Federal Government has taken to address underground storage tanks. In 1984, Congress enacted a comprehensive program to address the problem of leaking tanks. This was in reaction to the discovery of groundwater contamination in different parts of the country and its linkage to underground tanks. In fact, Rhode Island played a leading role in formulating that

debate. A 1983 60 Minutes report about leaking tanks in Canob Park in Richmond increased the nation's awareness about this widespread problem.

The 1984 law imposed minimum Federal requirements for leak detection and prevention standards for underground tanks. In 1988, owners and operators of existing tank systems were given 10 years to upgrade, replace, or close tanks that didn't meet minimum Federal requirements. As the deadline passed in December 1998, many underground storage tanks failed to meet the Federal standards to prevent spillage, overfilling, and corrosion.

As ranking member on the Subcommittee on Superfund, Toxics, Risk and Waste Management, I was concerned about the potential problems regarding tanks. To assess the situation, I asked the U.S. General Accounting Office to examine compliance of tanks with Federal requirements. Last May, GAO concluded that approximately 76,000 tanks have never been upgraded to meet minimum Federal standards. In addition, GAO found that more than 200,000 tanks are not being operated and maintained properly. GAO cited infrequent tank inspections and limited funding among the contributing factors.

In order to assist communities that are grappling with these problems and to prevent such problems from reoccurring, I introduced the bipartisan Underground Storage Tank Compliance Act. It requires the inspection of all underground storage tanks every 2 years and for the first time focuses on the training of tank operators. It simply does not make sense to install modern, protective equipment if the people who operate them do so improperly. The bill also provides the Federal Government and States with the tools necessary to ensure that all parties are meeting Federal standards. In addition, the legislation emphasizes compliance of tanks owned by Federal, State, and local governments, and provides $200 million for cleanup of sites contaminated by MTBE.

While my bill solely addresses the tank situation, there is a separate effort ongoing in Congress, which I support, to permanently ban the use of MTBE in gasoline. Last September, I voted for a bill in the Environment Committee that would ban the use of MTBE, while maintaining the clean air benefits that it has provided. My underground storage tank bill is independent from that effort because, even if we get MTBE out of the gasoline, we must still fix the tanks so that ordinary gasoline does not spoil our environment.

I am looking forward to the testimony of our witnesses. I am very grateful that the town has been pro-active and willing to share its problems in order to promote solutions. It is a model for solving our problems, and I assure you that I will bring your experiences and advice back to Washington as we continue to find answers to these pressing questions. The Canob Park story in 1983 opened our eyes to the problem at the beginning, but the MTBE crisis in Pascoag has taught us that our work is not done.

Senator CHAFEE. Now it's my great pleasure to introduce the senior Senator from Rhode Island, Senator Jack Reed.

OPENING STATEMENT OF HON. JACK REED, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Senator REED. Thank you very much, Senator Chafee. Let me commend you for holding this hearing and for your very proactive role on the Environment and Public Works Committee, not just with respect to this issue, but so many other issues that affect the environment in Rhode Island and the nation.

The past few months have, obviously, been very difficult for the people of Pascoag. They have endured one of the most serious drinking water crises in the State's history. The good news, though, is that clean water is again flowing home to homes in Pascoag. The Pascoag and Harrisville Utility Districts, the EPA, and Rhode Island DEM are all to be commended for making funds available to install filtration systems, and, most importantly, to expedite the construction of new wells in Harrisville to bring clean water to Pascoag residents last month, but we have a lot more work to do, both to continue removing MTBE contamination here in Pascoag and to ensure that problems like this do not arise again.

The legislation that Senator Chafee has offered will go a long way in improving the ability of Rhode Island and other States to inspect underground storage tanks and cleanup contaminated sites when leaking equipment allows contaminants like MTBE to enter our water supplies. I'm proud to be a cosponsor of this important legislation.

Senator Chafee and I are also co-sponsors of legislation to phase-out the use of MTBE as a gasoline additive. While the clean air benefits of MTBE are significant, we know now that it poses an unacceptable risk to the water that our children drink—that all of us drink. We need to find better ways to protect air quality without jeopardizing our precious groundwater supplies.

Understand the short- and long-term health impacts of exposure to MTBE is another critical part of our effort. I've asked the Federal Agency of Toxic Substances and Disease Registry to conduct a public health consultation to address concerns raised by many Pascoag residents who may have been exposed to contaminated water last summer.

Representatives of the ATSDR will be in Pascoag next Monday and Tuesday to meet with the public.

On Monday, March 4, from 7 p.m. to 9 p.m. at the Burrillville High School auditorium, the Agency will hold a public meeting to talk about health data they have collected so far and to give residents an opportunity to voice their concerns. To give Pascoag residents a chance to talk with Agency personnel in a more private setting, the Agency will also hold two public availability sessions, on Tuesday, March 5 from 2 p.m. to 3:30 p.m. and 7 p.m. to 8:30 p.m., also at the Burrillville High School auditorium. I hope everyone will take advantage of these sessions with ATSDR public health experts, to get a clear picture of the extent of exposure to MTBE among Pascoag water users.

Finally, I want to note that in addition to the contamination issues we're dealing with in public water systems like Pascoag's, we also face the problem of contaminants entering private wells throughout Rhode Island.

I'm preparing legislation that will help States, like Rhode Island, cover the cost of private well testing in areas of suspected contamination, so that when problems arise, thousands of our citizens who drink water from their owns well will have some assurance that their families are not being exposed to dangerous chemicals.

Again, let me thank Senator Chafee and also thank our Congressman Patrick Kennedy, who in the House of Representatives is one of the most persistent and most effective voices for environmental quality in this country. It's a pleasure to be with both of them this morning and to be with the people of Pascoag.

Thank you, Senator Chafee.

OPENING STATEMENT OF HON. PATRICK KENNEDY, U.S. REPRESENTATIVE FROM THE STATE OF RHODE ISLAND

Mr. KENNEDY. Thank you, Senator Reed, and my good friend, Senator Chafee, for your good work.

I just want to highlight, Senator Reed, your bringing up to Burrillville the experts in this area so that they can answer many of the questions that residents have in Burrillville about what the

long-term impact of exposure to MTBE may be, what their health risks and what the signs behind this is, and I commend you, Senator Reed, for you working and your office working on making that available to the residents here in Burrillville, and I certainly support that effort.

I also want to say that I support your effort, as with Senator Chafee, to make sure we get funding for testing of the private wells. I've met with many residents up here who are concerned, as you mentioned, about whether their private wells are contaminated. They want to be able to test their wells. They know they're in the areas that are often affected and they want to be able to get that testing done. The State needs the funds necessary to conduct that testing, and I think I can look forward to working with both you and Senator Chafee to try to provide the funds to our Director of Department of Environmental Management, Jan Reitsma, who is here today, so that we can have a statewide testing program for those wells that are in jeopardy of being contaminated.

But, most importantly, finally, let me just say, I support what's already been said by Senator Chafee and by Senator Reed about the efforts in the Senate to phase-out MTBE and also to address the problem of leaking storage tanks.

Senator Chafee has been a leader in the Congress, in the Senate on the area of brownfields, and his legislation was passed and signed by the President. That is an area that we all have a great deal more concern with now that we see the impact on a personal level up here in Burrillville to residents here in Pascoag being exposed to MTBE. Now they understand how important the legislation that Senator Chafee has introduced is to them, and I just want to say that I look forward to working with my colleagues in the House to introduce companion bills in the House that have been introduced by Senator Chafee and Senator Reed in the Senate. I look forward to working with my colleagues on the committees of jurisdiction, to make sure that they are co-sponsors, and, if need be, I look forward to sponsoring the legislation in the House.

I hope that we get some discussion about these issues in the upcoming Congress because we know they're very important, to not only the people here in Pascoag but to people across the country who have faced this problem before.

I hope we also get a chance to debate issues of International Free Trade. That had implications for us when looking to ban MTBE. I understand our State House is now considering banning MTBE from our gasoline here in Rhode Island. If they were to do that, as California has done, they would be subject to an international lawsuit by the company that manufactures MTBE up in Canada. The company would be able to sue the State, as it is currently taking action against California, as, by saying that it is a violation of their free trade provisions. In other words, it would be an imposition on them for being able to freely trade their product. It's incredible to me, I hope that you find it equally outrageous, that our current trade laws permit companies that manufacture this product, like the one in Canada, to continue to press their product on us, despite our own reservations and willingness to ban. It won't be banned under international law because of free trade provisions that require it to be sold. So that is an interesting question that we'll need

to debate in the upcoming Congress. I certainly oppose the kind of fast-track efforts in trade that would allow these companies to usurp our own sovereignty here in Rhode Island and other places in our efforts to try to ban MTBE from our gasoline supply.

But, finally, let me just say, I am pleased to see some residents here from the Pascoag District who contacted my office and who worked closely with me so that we can get money from our own State Resolving Fund for underground storage tank leakage and repairing those tanks.

I also want to say that, for Steve and Cathy Knowlton, they were wonderful advocates. I had the chance to meet with them, as well as with Linda Monahan, Heather Covice, and Mike Wallace, who is one of your residents testifying about this situation.

I visited the homes when they were contaminated. I sniffed the water. I went into the bathrooms when the showers were on and saw for myself how toxic this smell was. As someone who suffers from lung, pulmonary disorder and asthma, I certainly could appreciate the concerns that many had about breathing in the steam from this MTBE. I am very glad that you have such great active residents here in Pascoag, who had to really fight and fight hard to get your voices heard. I want to commend them, because it's the essence of what active citizen participation is all about, that they were able to knock down my door, knock down a few other doors and finally get the needs of the Pascoag residents met in terms of clean water supplies. So, to all of you who worked hard on that, I commend you for your good work, and I look forward to continuing to work with you in order to keep Pascoag's water clean and safe for all residents into the future. Thank you.

Senator CHAFEE. Thank you, Senator Reed, thank you, Congressman Kennedy, for representing the good citizens of Pascoag on all their issues through the years. Before we go to the first panel, I would like to thank Ted Garille and the Pascoag's Water Utility District for their generosity in providing the facilities for this field hearing. Their work on this crisis has been a true service to this community, and I appreciate their hospitality this morning.

I would also like to thank the local Boy Scout troop for lending us their speaker system today. I certainly appreciate their good deed.

Our first panel consists of George Reilly and Michael Wallace, both of whom are Pascoag residents, and Jan Reitsma, director of the Rhode Island Department of Environmental Management. I'm happy to have you here. Mr. Reilly, our hero, and without your persistence, the ball wouldn't have started rolling here. It's an amazing story of how you went down to the Health Department, and I would like to hear your testimony. Let's start with you. Thank you.

Mr. Reilly.

STATEMENT OF GEORGE REILLY, RESIDENT, PASCOAG, RI

Mr. REILLY. Basically, the problem arose sometime in the middle of June 2000, after a fire leveled two houses down the road. I noticed a funny taste and smell to the water we were receiving from the Pascoag Utility District, which I will call the PUD from here on in.

At first I thought it could be chlorine and called the Water District and questioned them about the taste and odor. The Water Department told me that they had been putting chlorine in the water because they had drained something, I don't remember the words they used, due to the fire. This sounded reasonable to me, so I did nothing further at that time.

About the middle of July, I became concerned because the smell and odor still remained, but now it seemed more chemical like and less like chlorine. At this point, I called PUD again and at this time they sent someone to test my water. When I called later for the results, I was told that the State laboratory had said that the water was fine. Then I did nothing further.

By the end of August, I could not take the taste anymore and began using bottled water for cooking and drinking purposes. So I called PUD for the third time complaining about my water. Once again, I was told the water was free of any bacteria and the State said it was all right. I replied that the water may be free of whatever they were testing for, but if they believed it was all right, then they should come up and have a drink. I was told that would require another test. I don't know if it was ever tested again. I did know that I could not accept PUD's assessment of the water.

Senator CHAFEE. Mr. Reilly, one of the people really interested in your testimony is in the back, I see some people cupping their ears. So, I'm sorry to interrupt you.

Mr. REILLY. Since my wife said that she could not notice anything wrong with the water, I decided to ask some of my neighbors if they noticed anything strange with the water. The first person I talked to said he could not notice anything strange, but that his wife refused to even bathe in the water from PUD.

At that point, I contacted a private laboratory and was told that it would cost me thousands of dollars to have the water tested, so I turned to the State of Rhode Island. I went to the Department of Health and requested the test of my tap water. What did I want to test it for, I was asked. I told them, if I knew what I wanted to have it tested for, I wouldn't have to have it tested, would I. The clerk handed me a yellow price list showing what it cost to do whatever test I wanted. I had no clue as to what I needed. The clerk, noticing my dismay, referred me to a rack of pamphlets nearby and told me to see if there was anything there that I might recognize as being the problem. When I read through a number of these pamphlets, the only thing that jumped out to me was the MTBE description. It said MTBE was an octane enhancer added to gasoline. My last recollection of the odor was that it smelled a little like the odor you get when riding behind some small pick-up trucks. So I told the clerk I wanted the basic test, which was $79, and a test for MTBE, which was a test for $115. He then called a chemist from the laboratory and she came down and handed me the materials that I would need to return to the lab to test my water. However, she said, I would have to wait for her call, since the tests were time critical and since her computer was down. This was a Monday or a Tuesday. She called on Thursday and told me to take my water samples and bring them down. I did. She told me I would hear within a few weeks of the result. I left. Before that afternoon was out she called and advised me not drink the water,

nor bathe in it unless I had adequate ventilation in the shower. She also advised me that the PUD would be notified and that further testing would be required.

On Friday, the further tests were taken and PUD was supposed to notify its customers by Saturday that they should not use the water for drinking or cooking. I only found out that the water was unsafe, officially, because my wife happened to see a sign in a store window.

The MTBE problem existed for another 4½ months. I was reimbursed for my expense.

In summary of this section, I believe the problem arose due to a lack of concern by the PUD—I later learned that they had received many calls, a lack of information as to what problems can arise in a water system and a lack of resources or resourcefulness by the PUD.

Consequences of the problems:

Health problems. Rashes, respiratory problems and psychological problems have all been reported.

Business problems. Unable to meet the extra costs for water, at least one business closed. Restaurant and bakeries lost business due to resident fear of contaminated water.

Financial problems. Many residents forced to travel in order to take baths and/or showers. Some had expensive wells drilled. I believe that the State is going to reimburse for extra expenses caused by the problem, but at that time no one knew that had happened.

Weather problems. Being the fall and winter season, people heating with steam were under a great strain.

Family problems. Relatives and friends afraid to visit or stay over. Fearful of contamination.

Municipal problems. One village pitted against another over water.

Problems addressed or not addressed:

No immediate help from State. Governor offers coffee.

Charitable contributions start arriving; 6 gallons of water per week.

Citizens form action groups. Linda and Robert Monahan form a group to keep media and citizens aware.

EPA sends grant. Governor confiscates it, except to buy a little more water.

Underground Storage Tank Responsibility Fund used to buy temporary filters.

Cindy Jette, Mary Ryan and others bring suit to have contaminated wells shut down.

Judge orders shutdown and orders neighboring village to supply water.

Some of the afterthoughts:

Why was there such a lack of immediate response or concern by the PUD?

Why did it seem like the PUD was only interested in keeping authority and employment instead of finding a solution to the problem?

Why did the Governor treat the problem in such cavalier fashion?

Why was there so little municipal involvement?

Why did the Underground Fund wait to be asked if it could do something?

Why can business, such as Potter's, had same type of problem in Warwick, not be subject to criminal negligence?

Why is MTBE still being added to gasoline in Rhode Island? Is there some financial benefit?

Why have not the concerned citizens, the doers, as mentioned above been given a hearty thank you?

Mr. KENNEDY. Thank you, Mr. Reilly.

Senator CHAFEE. Thank you very much, Mr. Reilly, good questions for all us.

Next is Mr. Michael Wallace. Welcome, Mr. Wallace.

STATEMENT OF MICHAEL WALLACE, RESIDENT, PASCOAG, RI

Mr. WALLACE. Thank you. Everybody hear me OK? I have no written testimony, so I'm going off the top of my head here, having lived through this. I would like to thank Representative Kennedy, too, for the kind words a few moments ago.

My name is Mike Wallace, father of five. I have lived here in Pascoag for the last 15 years. I am a registered nurse.

One of my small children came home late September, said, "Dad, there's gasoline in the water." Well, she is a little nuts, like the rest of us, so I didn't pay much attention to it. A few days later a newspaper article breaks out that our water is contaminated. I said, "Oh, boy, what's going on now?"

I recently read that the water here in Pascoag within the last year came in second nationwide for taste clarity and such. It was pretty good stuff coming out of the faucet. Now the joke was you couldn't smoke in the bathtub.

Shortly thereafter, a standing room only meeting was held in the middle school. Questions could be answered and such by dignitaries and specialists in contamination of the water. Three or four hundred people were there. You could hear a pin drop as people on the stage described to us what was going on with the main water supply. They had an open microphone period after this and people were allowed to come up and voice their opinions. It was a daunting task to stand up in front of 400 people—not too much what I'm doing here—and it was odd that no one had spoken together amongst themselves during the meeting. About 30 to 40 people spoke. They had plastic bags full of medication, photos of their dead and ill pets and domestic animals. They all had the same story—hair loss, memory loss, rashes, bronchitis, pneumonia, asthma.

It was one of the very warm weeks of September. My wife and I both are nurses. We thought they were pretty strange symptoms, all the same people, all congregated down the hallway with 20, 30 or 40 similar stories.

We all had talked among ourselves at CVS, at the local pubs and restaurants and pizza joints about how funny the water tasted. No one knew what was going on. No one had an answer, but we also had a thousand questions.

So I turned to my wife then and said, I'm getting involved with this. Linda Monahan, a good friend of mine now, said she was going to picket the next day. She was going to try to close that

Mobil Station. I guess we were having some trouble in court doing that. We've got to stop the flow of this poison. So for 8 hours the next day in the hot sun, with migraine headaches from the gasoline fumes, at 3:30 p.m. we closed that gasoline station, with a lot of support from the town.

We formed an ad hoc committee and organized in the wee hours of the morning in Linda's kitchen. We said, "We've got to fight this. We here in Pascoag feel that we've been wounded twice."

I know I'm surrounded by all these politicians and such and I'm feeling somewhat inhibited, but we felt we had been wounded twice, first by the contamination of the water and also by the inaction of politicians. It took a long time. I got a good look at political inaction, but I also got a very good look at inactive politicians. I very much appreciate what you're doing now, but I would like to have seen this meeting 150 days ago.

We went 140 days without water. Take a small child, a baby needing to be bathed four, five, six, seven times a day. Sit down now in your chairs and see how you're going to do that with a gallon of water. People are petrified to use their tap.

I'm a fairly healthy specimen, maybe a little too healthy, but somewhere in August I developed a pneumonia. It took 5 weeks to clear, 20 days of antibiotics. Inhalers were laying around my house like crayons. My children, my son had pneumonia twice, bronchitis and asthma. When I take a shower, the kids go outside because of the coughing and gagging. It was a joke then, but it isn't a joke now. So, I'm not going to go on anymore. My voice is shaking, but there was a pall that descended over this community.

A pall from which no light has really come yet. Too long—140 days without clean water coming from my tap. We never took it for granted. We've never forgotten it. We're quite angry over it. We're hoping with legislation like this, that not only do the tanks get protected and the stuff stops seeping from the tanks into the water, but also the little guy gets taken care of. No one was thinking of us. We asked for help and we got turned down. Not until we demonstrated on the steps of the State House, put our face in the cameras every 5 minutes, and thank God for the media, thank God for the newspapers and the press keeping this story alive, and the politicians that did get involved, but it was long in coming. We hope it never happens again. If anything, we can learn from our hindsight, that the little guy needs protection.

We still need to know what can happen with the long-term health issues created by this problem here in Pascoag. We don't know what they are, but we do need someone to take a look at it.

Thank you very much.

Senator CHAFEE. Thank you.

Next is the director of DEM, Jan Reitsma.

STATEMENT OF JAN REITSMA, DIRECTOR, RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT, PROVIDENCE, RI

Mr. REITSMA. Thank you, Senator Chafee, Senator Reed and Congressman Kennedy for being here and for giving me the opportunity to testify on what I believe is very timely and important legislation, the Under Ground Storage Tank Compliance Act of 2001.

I would like to recognize the leadership that you, Senator Chafee, have provided on this, as well as other interests, including the legislation on ground fields that was routinely successful, which will make a huge difference for our ability to clean up and redevelop ground field sites in the State.

The legislation before us now is, in fact, timely and important because we are entering, I believe, a new phase in our tank program. After having worked for years on making sure that we have adequate corrosion, protection in place, and the 1998 deadline of getting obsolete tanks out of the ground and otherwise upgraded, we're now looking at a new phase in which we need to make sure that the complexity of operating tanks properly is being overseen right and the funding is in place for the State as well as the tank operators to do the right thing. We believe that this legislation establishes much needed criteria and priorities for this new phase in the underground storage tank program.

I also commend you for taking this location for your hearing here in the Village of Pascoag. We are at the epicenter of the most serious case of MTBE contamination in Rhode Island history. Serious release of gasoline occurred just down the street at a facility operating underground storage tanks, less than 1,700 feet from the sole source of drinking water. From Labor Day 2001 to this past January, 4,000 people endured the hardship of going without potable water and living with the anxiety of not knowing what was going on with their health. Through the hard work of many people and agencies at the local, State and Federal level, we were able to bring a line and replace their source of water, and I do think it's appropriate to recognize the very active citizen participation which drove a lot of the effort.

I do want to take issue with some of the characterizations about the Governor in particular. He's not the kind of guy who thumps his chest, but he instructed us from the very first day, asked State agencies to get together and try to develop a strategy.

I think what we have learned from this case is that there is, in fact, no quick, easy solution for a situation like this, but also that in this State, and probably in other States, we're really not set up very well to deal with these kinds of situations, and the other lesson is that responding to a situation is probably not the right solution. Prevention is what we need to focus on more and more, and that's what this legislation I think is focusing us on.

Now, before I give you specific comments on the legislation, a little bit of background.

We all know that underground storage tanks are used in a very widespread way, both in the State of Rhode Island and across the country. The majority is used for storage and distribution of fuels, including gasoline and diesel. In the little big State of Rhode Island alone, we have more than 3,300 registered tanks located at 1,784 locations at last count.

Senator Chafee, you've already given an overview of the Federal level history of regulation, starting in 1984, with the minimum requirements for tanks, later the addition of a trust fund to help with the response to releases from leaking tanks.

The goal at the time was, as of 1988, to upgrade all of the underground storage tanks in the country in 10 years through a program

to be implemented jointly by EPA and the States, and that has been a very successful partnership, in part we believe because under the partnership States had disbursed flexibility to implement the programs in ways that made sense to their particular situation, and the partnership has become a model for our Federal and State Government to work together to our common goal.

I mentioned that flexibility because you will note that there is a theme in my comments.

In Rhode Island, at the State level, our program also started in 1984, first as an extension of our water pollution program. Regulations defining operational and financial requirements were adopted in 1987. In 1994, the General Assembly also established a cleanup account, to be funded by a portion of the tax and gasoline sales, and this was meant to help the financial responsibility obligations of tank owners and operators in the State, and, finally, regulations establishing procedures to determine eligibility and provide for reimbursement were promulgated in 1997.

More recently, with EPA and DEM, we joined with the Review Board for the Underground Storage Tank Financial Responsibility Fund, that cleanup account, and we've been effective, we can say. Since the beginning of our program, we have regulated almost 9,000 underground storage tanks holding petroleum products. Of that number, almost 7,000 or 80 percent have been permanently closed. The remaining universe of tanks have been largely upgraded to current standards, such that today 98 percent of facilities with active tanks in Rhode Island meet regulatory standards for leak detection. Through all of this Federal assistance has been critical.

Since 1985, EPA provided more than 3 million for our program, which was supplemented with fees collected for owners and operators of tanks.

In terms of leaking tanks, Rhode Island, as you, Senator Chafee, noted has a dubious priority of providing live experience. We have, indeed, had a lot of experience with leaks. Pascoag was really only the most recent case. In the history that includes 1,489 confirmed releases. Fortunately, 75 percent of that, or more than 1,100 cases, we've been successful with complete cleanup. One hundred and twelve sites are still being monitored to ensure that conditions continue to improve. At 369 sites, as of this date, still have corrective measures ongoing or still require such action. I provided more details in the written comments, and I will repeat them here, but I do want to know that our experience shows that impacts from leaking tanks are a concern that we understand is—that impacts from leaking tanks are not limited to drinking water or to drinking water supplies. Contamination has migrated from those drinking water supplies. The water supply is below, into utility lines, causing risks of explosion, as well as indoor air pollution, to the point that courthouse, businesses and residences have been evacuated in Rhode Island, and the associated costs have been astronomical.

Since 1987, EPA has provided another $9.5 million in Federal funding to help us respond to leaks and to support our program.

Since 1998, the Rhode Island Underground Storage Tank Responsibility Fund has reimbursed tank owners and operators for more than $21 million in expenses incurred responding to leaks at

155 facilities through the State. We cannot even begin to guess the cost incurred by businesses in responding to the spills.

The specific comments of the legislation: My first comment is flexibility and the remaining comments are a variation of that same team.

We strongly support what we see as the primary principle of the bill, which is to give States greater flexibility to implement the tank program, particularly by providing more flexibility in how we use the funds, but in particular our ability to do more proactive work on preventing leaks. That flexibility and proactive approach are very much needed, as we deal with the fact that releases from underground storage tanks continue to occur, notwithstanding the many improvements achieved to date in operating a leak detection system, and as we learn more about the complexity of operating tanks properly, as well as the complexity of responding to leaks.

The second comment is on inspections, and, again, on flexibility. The bill calls for inspections every 2 years. At first, we were concerned we would not be able to meet that mandate, a concern that we understand is shared by other States. Limitations in terms of staffing and funding have restricted our ability to inspect tanks in Rhode Island to a frequency of only once every 6 or 7 years. Of course, we recognize that this is a unacceptable, and it is not providing the level of protection necessary, but we have not been able to build on our staff to a level that would allow more frequent inspections.

We do believe, however, that it may be an effective alternative where we would allow qualified inspectors to conduct the checks and monitoring and to certify compliance subject to the State Audit Program that would consider priorities such as this to water supplies in sensitive natural areas.

We urge you to make sure that the legislation will provide that kind of flexibility, in particular during the transition period so that States can develop innovative ways to meet the legislative goal.

The third comment affects the training. We support the concept of better training for operators of underground storage tank systems. We also believe that EPA is, in fact, well suited to develop guidance, but we do know that guidance, again, must be flexible enough to allow States to develop innovative approaches.

Descriptive requirements may have the unintended effect of stifling innovation, reducing our ability to respond to changes in technology and limiting programs to the lowest common denominator.

We urge you again to make sure that States will have flexibility to tailor training programs to their specific needs as well as the needs of the stakeholders in their States.

The fourth comment is on funding. We agree that EPA should distribute, at a minimum, 80 percent of the funds appropriated.

It is our understanding, in fact, that on average EPA is already doing this, which we applaud. Given that most States are the primary implementers of this program, it is critical that we continue to receive these moneys to help us continue and expand our effort.

We also welcome provisions that would explicitly allows us to use these funds for oversight and protection programs, areas that we have had problems in the past. Rhode Island supports, by the way, the allocation process EPA is critically using.

Finally, we now can support the incentives that will be provided by awards up to $50,000 for innovative State operator training programs and State facility compliance strategies.

Finally, and of most importance to this particular community, we strongly endorse the one-time appropriation of $200 million for remediation of MTBE contamination.

Our experience in the Village of Pascoag and other cases has made one thing very clear, controlling and removing MTBE from the environment after early release is not a simple task. High solubility and rapid migration in Pascoag over 13 acres make conventional treatment, such as sump and treat and vapor extraction less effective. It is hard to bring high concentration, which in Pascoag leaves 1,800 parts per billion, down to the standard of 40 parts per billion. Treating large volumes, such as 200,000 gallons per day Pascoag to that lower level turned out to be much more costly than we estimated originally.

Finally, we are finding that even 40 parts per billion level does not necessarily mean that the water is, in fact, drinkable, as odor and other problems may well persist.

In short, all signs indicate that MTBE is going to be the major problem for UST and other State programs, it's going to be with us for a while, and the associated costs are going to be much higher than we may have thought.

A significant appropriation like this is not only appropriate, but absolutely necessary.

A quick comment on the MTBE ban versus a phase-out. I do think it's important that we make a distinction that we provide for a position. A ban could have all kinds of unintended consequences. I am a little bit less concerned about Canadian companies suing us, and I hope that some new law will be made, if necessary, in that regard, but there are other issues in terms of infrastructure and the cost that might result, but we truly support legislation phasing out MTBE as quickly as possible. We also very much support legislation that would fund the investigation into private wells, a program that we have had a very hard time building in Rhode Island, and we are sure the Department of Health would join in that initiative.

Thank you, again, very much for coming down to the Village of Pascoag and providing this opportunity for comment.

Senator CHAFEE. Thank you, director.

Senator REED. Thank you very much, Senator Chafee. Again, I would like to commend you for this important hearing. Thank you, Mr. Reilly and Mr. Wallace. Thank you so much for your testimony and, more importantly, thank you for your efforts together with your neighborhoods in Pascoag to reminding us of our obligations. One of the basic obligations is providing safe water for all of your citizens.

I'm still concerned, particularly after listening to Mr. Wallace, about health effects, and that's why I'm pleased that we have the Federal Agency here on March 4th and 5th at the Burrillville High School to talk with these issues you raised.

All of this I think goes back to the point that Mr. Reitsma made. I hope that this is not just about looking back and critiquing, but looking ahead and preventing. That raises a whole set of questions.

I must apologize, because I have to go ahead with Representative Kennedy down to Raytheon. Are we organized in Rhode Island to get out if front of this issue in terms of both DEM and the Health Department, to ensure that we identify potential sources of contamination, particularly close to water supplies, and take a proactive role so that we don't rely again on citizens spending months and months and months with a problem that we're not aware of?

Mr. REITSMA. Senator, unfortunately, I don't think we could honestly say that we're prepared to do the right thing. Yes, it's clear, as we have learned from this case, that we are not set up in Rhode Island either to respond very effectively or quickly to these kinds of situations or to effectively prevent them from occurring again, but we did learn from this particular case that that is what needs to be happening, and I think a lot of things need to occur for that to become possible. Certainly, the current State of the law is such that local communities or local districts have the legal responsibility to address this kind of a situation. Well, that may be the law on the books, but it's not the reality, and we need to deal with that. We need to work with the General Assembly, perhaps a redefinition of the State versus local responsibilities. Again, this legislation will be very important. It will provide additional funding for us to shift the two or more preventive approach and a proactive approach, so that we don't put all of our eggs in one basket and try to just improve the responses to leaks after they have occurred.

Senator REED. Thank you, Senator Chafee.

Mr. KENNEDY. I would like to join Senator Reed, but I do want to bring this issue up again about the phase-out, because right now California is being sued and the company is called Methanex. It's able to sue under Chapter 11 of our North Atlantic Pre-trade Agreement, NAPTA, and they brought their first suit against a community in California that had the similar problems that we had here in Pascoag and decided to phase it out. California has decided to do that, but under Chapter 11 of NAPTA the citizens of California could be liable—get this—could be liable for the investor loss that—the investors who have made investments into Methanex Next Company, they could have to—they might be liable to pay those investors for phasing-out MTBE from their gasoline, and that's currently permitted under a free trade agreement. So, that's not something that we could just pass a law and end, but it is something, that if we do take up fast track this year, which I expect the President will bring up, that we could correct this problem by amending Chapter 11 portion of our Free Trade Agreement. I hope and I look forward to working with my colleagues to do that, so that we can phase it out.

Thank you, all of you for your testimony. I know many more of you have equally compelling stories about what it was like to wait and wait and wait for some action by your Government, and let me just say, thank you for your leadership. I'm so terribly sorry for what has happened to you and your families. It's clearly affected you in so many different ways, and I certainly hope that we can pass this legislation to prevent it from ever happening to anybody else. I also hope that we can get legislation passed that will help you be compensated in some small measure for the very practical

financial loss that you have suffered. Certainly, there's no way we can reimburse you for any of the incredible psychological and physical losses that you've suffered as a result of this crisis. So, all we can say to you is that we hope to take from this experience something that will prevent anything like this from ever happening to anyone else.

Thank you for your testimony, both of you, and for your actions, for your persistence. I'd now like to turn it back to Senator Chafee, and, once again, thank him for holding this hearing and thank him for the work he is doing on this legislation.

Senator CHAFEE. Thank you, Congressman. I look forward to working with you on the companion legislation in the House.

Mr. KENNEDY. Sure.

Senator CHAFEE. I'll give Mr. Reilly and Mr. Wallace one more chance to get the bug worked out. We do learn from it, but we can do better. Would you like to expound anymore, Mr. Reilly, on just your experience with the bureaucracy and your disappointment? We do learn from it, and I appreciate your testimony. That's why we're here.

Mr. REILLY. Basically, no. I have nothing more to say. Again, we were disappointed, and I think we wished that things could have happened, but, as we said back in the beginning, as long as it looked like someone was starting to be concerned, starting to be involved and attempting to do something about the problem, that's all that we're looking for. I think, as you gentlemen have explained to me, you people are doing that, and from my point of view, that's all. Thank you very much.

Senator CHAFEE. Mr. Wallace.

Mr. WALLACE. I agree with Mr. Reilly. We've had enough negativity here all these past months, so let that bubble over. It's just an old song now. The help is long in coming, we realize that. We can use that to help things in the future, too. So, let's move ahead, let's work together and let's look for that ray of hope over this dark cloud that's covered us for so long. It's such a relief to have clean freshwater coming out of your tap, something many of you here take for granted. You just cannot believe. We joked a few months ago that we couldn't drink it unless it came out of a bottle, and I'm on my second glass. But, thank you for your help.

Mr. KENNEDY. Well, I am on my first glass.

Mr. WALLACE. Thank you for your help and I look forward to working with many of you in the future. Thank you very much.

Senator CHAFEE. Thank you very much.

Mr. Reitsma, I would like to ask you about your experiences with the offender in this case, Potter Mobil, and just what it was like from the beginning to the end, in just dealing with a tank that does leak.

Mr. REITSMA. Unfortunately, I can't provide you as many details you might be interested in because the case is still in the courts. As you probably know, Potter has gone into bankruptcy, which has forced us to proceed with the investigations and cleanup, essentially on our own, pending decisions by the Bankruptcy Court, to what extent they might be held responsible or not. That's not the first time we've been involved with Mr. Potter and his business. We've had other instances, as you well know. It's been frustrating,

on the one hand, that people who clearly have involvement in the release of this fuel into the environment find a way not to take as much responsibility as we would like them to take. On the other hand, fortunately, in this case we have been able to proceed, and I know Terry Gray is here, the assistant director of DEM, who can give you a lot more information about how we deal with the cleanup aspects of this particular case, and I think that has been proceeding really well, because we all know across the country that experiences often that the responsible parties are either not around or plead poverty. That doesn't stop us. We are proceeding with the cleanup. It will take many years and many millions, or thousands being probably millions of dollars, but even though we don't have the responsibility party in the hot seat right now, we believe that we can achieve the cleanup, which, by the way, is very important. Some people have argued that we should just let the water supply go since there's no clean water from the Harrisville district. We believe, as part of the longer-term approach to these kinds of issues, that it's incredibly important to get redundancy in our water system, so cleaning up this water supply is an important goal for us and we believe we're making pretty decent progress given the circumstances.

Senator CHAFEE. OK. Thank you very much, gentlemen, for your testimony. We'll take a short break while the next panel gets ready to come to the table. Thank you.

[Recess.]

Senator CHAFEE. Can we get on with the next panel. OK, the next panel consists of State Representative Scott Rabideau; Arthur DeBlois from the DB Companies representing the Society of Independent Gasoline Marketers of America and the National Association of Convenience Stores; and Jeff Kos, president of Environmental Council of Rhode Island. I'll let Scott start with our State Representative here.

Scott Rabideau.

STATEMENT OF HON. SCOTT RABIDEAU, RHODE ISLAND STATE REPRESENTATIVE, HARRISVILLE, RI

Mr. RABIDEAU. Thank you, Senator. I want to echo the sentiments of everybody else. Thank you for bringing this field hearing to Burrillville, to the Village of Pascoag.

It's important for the citizens here to know that the elective leaders are working hard on this issue.

I want to start my testimony with a little bit of history. Samuel Slater may have brought modern industry to New England and the State of Rhode Island, but from 1900 until 1960, the center of all textile industries in this country was right here in northern Rhode Island. When you understand how the villages in Rhode Island developed, you start to see where the water resources became important and you start to see why your legislation is so important. Our villages were centered around the rivers. The rivers are the areas where we have the greatest amount of water being stored subsurfacely. We have water called outwash deposits along the rivers. This is true not just in Rhode Island, but this is true throughout the northeast. I just had the opportunity of coming back from New Hampshire. I was in northern New Hampshire and kind of

hoping Senator Smith might be here because I was going to talk about New Hampshire for him. I was in the towns of Colbrook, and there was another nice town up there, Lancaster. Those towns are located right along the Connecticut River, and when you're in those communities, like when you're in the communities of northern Rhode Island, you see gas stations right along the river. When you see the gas stations along these rivers, you also know that there are underground storage tanks. When the underground storage tanks have problems, what's happening is they're leaching out into aquifers, they're leaching out into soil deposits that contain the greatest amount of potable water for our citizenry.

Your legislation to toughen the laws to improve the reporting requirements is so critical, because all of us here in New England have all of our storm villages and all of our commercial districts along rivers. It's just when they developed this portion of the country, it was the easiest way to build roads. You followed the rivers, and, unfortunately, the commercial development followed along the same paths, and now we're faced with our commercial areas being located over the most important water resources we have.

You know, we are in a drought condition right now, and I've been telling people, whether or not this will come true, I hope it doesn't, I believe the Providence water supply is down somewhere in the range of 50 to 60 percent. If we don't get our spring rains, you're going to see the need for conservation throughout the State of Rhode Island this summer. Every time something like that happens, you know, it's one thing to happen to 4,000 people in the northwest corner of the State of Rhode Island in the Village of Pascoag, but when you see the restrictions start taking place throughout this State and throughout New England, your job is going to become harder, your calls are going to become more numerous and you're going to have to explain to them the importance of conservation and the importance of bills like this, the importance of protecting the resource area.

MTBE, the additive that caused the problem here in Pascoag, has just exacerbated the situation. It is one thing to have a gasoline spill with all the nasty chemicals that are in gasoline, but when they add an MTBE, a soluble component, a water soluble component, the result was that it will travel faster through the aquifers, through the soils.

If we don't have more stringent regulation of underground storage tanks, if we don't have the Federal Government allocating 80 percent of the money to the States, if we don't allow the States the flexibility to use that money, the States will be in a very difficult situation, and flexibility. I know Director Reitsma has left, but the flexibility issue that he talked about is very critical here.

When we had our crisis here in Pascoag, it was the ability of our DEM to allocate some of the UST, or the Underground Storage Tank, money to the cleanup and to the connection with Harrisville, because the connection with Harrisville didn't really fit the mold. Somehow, we were able to manipulate the system, which is what good politicians do, but somehow, we were able to manipulate that system so that the connection with Harrisville was brought into the fold and some of the money could be allocated toward that.

I believe your bill allows that flexibility. I believe your bill calls for 80 percent of the money being distributed to the States, and I would hope that your committee hears this testimony and that your committee takes it seriously and pushes it onto the full Senate floor, because I always look at New England and I say, New England has 12 percent of the Senators in the U.S. Senate. That's a big voting block where I come from, and that voting block should be speaking with one unified voice on this issue, because it is a more prevalent problem here in the developed northeast. We have much greater concentrations of business and industry located over our most variable water resource supplies. So I hope that they hear the voices of the people here in Pascoag today and I hope that they do the right thing and then push this legislation on.

I thank you again.

Senator CHAFEE. Thank you, Representative, very much for your testimony. In your real life job, you are a biologist, and I understand this, and you're absolutely right, if you go west, the past experiences is not a drop of water, not a green blade of grass to be seen in Rhode Island, with the ponds, river and streams everywhere, so it's much more an issue here, although there have been MTBE spills all around the country, but in much more worse in New England when it does occur.

The next testimony is Mr. Art DeBlois. He runs the DB stores and gas stations and he has to deal with the individuals that monitor the tanks, and we very much welcome your testimony here, Mr. DeBlois.

STATEMENT OF ARTHUR J. DEBLOIS III, DB COMPANIES, PAWTUCKET, RI, ON BEHALF OF THE SOCIETY OF INDEPENDENT GASOLINE MARKETERS OF AMERICA AND THE NATIONAL ASSOCIATION OF CONVENIENCE STORES

Mr. DEBLOIS. Thank you, Senator Chafee. Good morning. My name is Arthur J. DeBlois. I'm the president and CEO of DB Companies, an independent motor fuels operator headquarters here in Providence. DB Companies owns and operates 86 DB Mart stores in Rhode Island, Massachusetts, Connecticut and in Hudson Valley, New York. In addition, we have 84 franchise operation locations.

I want to thank you for inviting me to testify today on issues related to UST, that is underground storage tanks, your bill S. 1850, the Underground Storage Tank Compliance Act of 2001.

I'm here representing the Society of Independent Gasoline Marketers of America and the National Association of Convenience Stores as well. SIGMA is a national trade association of approximately 260 independent motor fuel marketing operators in all 50 States. Our members supply over 28,000 motor fuel outlets and sell about 48 billion gallons of gasolines and diesel annually. Approximately 30 percent of all motor fuel sold in the nation are sold through our outlets. NACS is a national trade association with more than 2,300 companies operating over 104,000 convenience stores nationwide and employing about 1.4 million employees. NACS members sell about 115 billion gallons of motor fuel annually.

First, let me state that SIGMA and NACS applaud you for holding this UST hearing today in Pascoag and for your leadership on this issue.

For today's hearings, the Association would like to send a clear and strong message to the residents of Pascoag. Responsible petroleum marketers have zero tolerance for the kind of release that has contaminated your drinking water supply. We're sorry for the inconvenience you've had to endure these many months. At the same time, we have been very longstanding and vocal advocates of vigorous enforcement of Federal and State UST regulations.

Further, S. 1850 takes additional steps to strengthen UST enforcement and provide more funds to address situations like the one that has occurred here in northwest Rhode Island.

As the Senator reminded us earlier, Rhode Island has played an interesting and key role in the history of UST regulations. The 60 Minutes show introduced to over 30 million viewers to the problems of leaking tanks. The narrator, Harry Reasoner, detailed the serious groundwater contamination problems at Canob Park, a 9-acre development in Richmond, RI, resulting from tank leaks. The CBS news stories were some of the catalysts that led to the enactment of the Federal Tank Law in 1984.

Much has been done in the last 18 years since that law was passed to prevent, detect and cleanup UST releases. Rather than having history repeat itself, SIGMA and NACS hope that the problems faced today by the residents of Pascoag will lead to prompt action by Congress to improve the current UST program by enhancing the abilities of States to enforce and address tank leaks and spills by expanding their allowable uses of the annual congressional appropriation from the Federal Leaking Underground Storage, or LUST fund, as it's known.

As you know, your bill includes over $460 million in new authorizations from the nearly $2 billion and growing Federal LUST fund.

I would like to make some connections between the situation here in Pascoag and your Bill S. 1850. That is, how the enactment of this bill will help to mitigate future Pascoags from occurring? Again, I cannot over-emphasize this point. NACS and SIGMA members do not condone the actions of the suspected UST operator, either before or after the leak was detected.

Last May, the GAO study, which the Senator referred to, "improved inspections and enforcement with better, safe underground storage tanks." That GAO study concluded in part that the EPA and States have failed to enforce consistently UST requirements. GAO estimated that nearly 3 years after EPA's deadline, the 10-year phase-in for environmentally protective tanks, only 89 percent of those regulated USTs have been replaced, upgraded or closed. GAO identifies State and local governmental agencies and very small businesses as the primary category of UST owners and operators who remain in non-compliance. GAO also indicated that rates of ongoing UST leak detection and compliance are lower than expected.

In this report, GAO recommended that the Congress could take several steps to address these identified inconsistencies from the existing UST program.

NACS and SIGMA support and continue to support these measures from GAO's recommendation and that you have included in S. 1850.

No. 1, authorize the use of LUST fund trust moneys by the States for UST enforcement.

No. 2, remove restrictions on the use of the LUST trust fund moneys by State UST funds. Permitting cleanup resources to be deployed more quickly, thereby minimizing cleanup costs and the environmental harm caused by a tank leak.

No. 3, provide additional funds for use by the States in addressing high priority releases, such as those containing MTBE, which occurred here in Pascoag.

No. 4, create a national UST data base to track, upgrade and close USTs.

Some people here may wonder why the petroleum market supports more infective enforcement of UST regulations. Let me explain our position.

First, small inventory losses can become huge financial losses to a petroleum marketer, given the slim margins that we operate on due to competition.

Second, since EPA promulgated its UST requirements in 1988, SIGMA and NACS members have spent hundreds of millions of dollars complying with tank standards. My company alone has spent over $5 million upgrading our USTs to meet the current regulations.

Further, many people, some of the large operators as well as some of the small two- and three-store operators, actually closed their locations in order to meet those compliance standards.

I testified many years ago at a hearing held by the late Senator John Chafee, that with a 10-year phase-in requirement, as the current UST regulations had, there was absolutely no reason why any UST owner and operator should not be in compliance.

Accordingly, NACS and SIGMA support the key elements of your bill; mainly, expanding allowable uses for LUST trust fund moneys, requiring every UST to be inspected at regular intervals, directing EPA to publish guidelines and training the operators in the proper operation of maintenance of USTs and requiring EPA and States to publish strategies for ensuring compliance for USTs owned by governmental agencies at every level of government and providing the additional funding for the remediation of certain high priority MTBE releases.

There is one provision in S. 1850 that SIGMA and NACS would like to change. As introduced, your bill limits the use of the Federal LUST trust fund moneys by State UST reimbursement funds, like the ones we have here in Rhode Island, where the UST owner or operator could face financial hardships but for reimbursement. This provision, we believe, encourages non-compliance by UST owners and operators. We believe that the elimination of this limitation will provide the State UST fund with more flexibility and would leverage those limited tank remediation funds to provide for quicker cleanup. Notwithstanding the experiences the residents of Pascoag, most UST cleanups are managed by responsible parties, that is the tank owners and operators and overseen by the State U.S. implementing agencies, such as DEM. The UST Corrective Action Pro-

gram largely has worked extremely well. As Mr. Reitsma pointed out in his testimony, over $21 million from a the Rhode Island State UST Fund has been expended to help cleanups, and those cleanups have gone extremely well. State UST reimbursement funds on a national basis, have expended over $5 billion in UST cleanup. According to State data, most of the State UST reimbursement funds are solid, although some of these funds are paying claims at a much faster rate than the revenue they receive. A growing concern of our members is that some State legislators, increasingly strapped for cash, might borrow or raid cash balances in these State UST assurance funds. This occurred here in Rhode Island during the State's last budget crunch in the early 1990's. Crash flow, therefore, remains critical to the success of the State UST reimbursement funds, and allowing the State to use some of its LUST fund trust moneys from EPA for its UST reimbursement fund is one way to leverage limited resources.

There is also a misconception that eliminating this limitation means the major oil companies are going to get a windfall. In all honesty, the major oil companies are one of the first groups of people to fully upgrade their tanks. In fact, removing the limitation would benefit Rhode Island's funds and its citizens. The funds here have worked well despite the severe funding limitations. In fact, according to State data, from late 2000 through the middle of last year, Rhode Island governmental entities placed a tremendous strain on the fund with 11 governmental sites consuming close to 48 percent of the balances. Yet, government entities don't pay into the fund because they are a tax exempt organization. Therefore, additional moneys from the LUST trust fund will be a boost to Rhode Island's UST fund. UST owners and operators are much more likely to complete tank cleanup if they know that, after they pay the required amount, the State UST assurance fund will timely reimburse their cleanup expenses. To state it differently, reimbursement will become stretched out over a long time, a UST owner or operator has an incentive to slow down the pace of its cleanup. Thus, limiting the use of those LUST fund moneys to State reimbursement funds will do nothing to help them clean things up more quickly.

SIGMA and NACS also feels that removing the limitation will assist with the cleanup of high priority releases, such as the one in Pascoag here containing MTBE.

As a final point, I would like to note SIGMA and NACS frustration level with the level of LUST fund appropriations. In many instances, the per gallon excise tax that funds the LUST fund is not passed on to the consumer by the marketer. It's our cost of doing business. However, the Federal LUST trust fund is now approaching an unobligated balance of $2 billion and growing. The current appropriation level is less than the annual interest in the fund, not including the ongoing tax burden collections that are increasing it further. The Government has and continues to collect this fund. S. 1850, your bill, recognizes this fact and authorizes a substantial increase in funding.

The Association hopes that the key elements of your bill will be enacted, and I will urge Senator Reed, once this legislation is passed, to push hard in the Appropriations Committee to get this

increased funding level. It will do a wealth of good for the State UST funds.

SIGMA and NACS appreciate this opportunity to present their views on USTs and S. 1850. The Association again regrets that Pascoag is the backdrop to this hearing and that the residents have been inconvenienced from the release that occurred. We look forward to working with you and members of the Senate and Environmental and Public Works Committee on these UST regulations. Thank you. I will be happy to answer any questions.

Senator CHAFEE. Thank you, Mr. DeBlois, very much. It's always been the situation where you have 89 percent, in this case responsible operators, and 11 percent that haven't complied. After 10 years, it's plenty of time to get into compliance, and we are still 11 percent shy, and that's what we're trying to fix with this legislation, to make sure after 10 years that we get everybody in compliance, as well as look as to how we can better improve the existing legislation, including a release the trust fund money, that everybody pays into a tenth of a percent tax that now is, as you said, fortunately, $2 million. We're getting into that money back national communities, as you do that.

Our next testimony is from Mr. Jeff Kos, president of the Environmental Council of Rhode Island.

STATEMENT OF JEFF KOS, PRESIDENT, ENVIRONMENTAL COUNCIL OF RHODE ISLAND, PROVIDENCE, RI

Mr. KOS. Thank you, Senator. I am Jeff Kos, president of the Environmental Council of Rhode Island. I, too, would like to thank Senator Chafee and the Senate Committee on Environment and Public Works for this field hearing and participation of Senator Reed and Congressman Kennedy. It's very, very important for you to come here to Pascoag to meet with interested parties in the area so that they have a chance to attend this hearing, and as well as those of us who are involved in various parts of this problem.

We have a number of our members, of our 55-member organizations who have been involved and continue to be involved in pieces of this issue, and we will go through a few of those as we go along.

I just wanted to take a moment to thank those residents who have given testimony today and those others who have sent in written testimony that we've been in touch with. It's very important for all of us to hear the human costs and the quality of life costs and their experiences here, so that you can learn from them and develop together the policies that will ensure that this doesn't happen again. As far as that's concerned, I would like to thank Senator Chafee for S. 1850. We believe it is a great step forward in dealing with underground storage tank issues. As Director Reitsma of the State DEM rightly pointed out, the flexibility and training components of this bill will have an enormous impact in preventing incidents of this in the future. So we do strongly support it. We have some concerns and have had some concerns about how all of these issues come together, and now it's been said in sort of a cliche, that a success has many fathers and that failure is an orphan, but in this case this failure has brought forward a lot of people who are willing to take responsibility for pieces of this problem and have worked together to solve these problems.

One of the issues that has come up that we have noticed, we have members on the Underground Storage Tank Board for the State of Rhode Island that have been problems related to disbursement of money over the years. Some concerns about third-party liability of the swiftness of taking care of those issues. I hope we keep those in mind as we go forward. I would like to thank Eugenia Marks for their service on that board. In general, they have made a lot of progress and have done a lot of work in dealing with these underground storage tank leaks and compensations over the years, but there are some gaps that need to be addressed and our followup written testimony will deal with some of that.

We also note that a number of agencies have been dealing with ripple effects from this spill. The Water Resources Board is re-examining its policies related to these issues, and, hopefully, we'll have some positive input on this. We have heard from DEM today. At the Attorney General's office there are several people working on MTBE-related language, and I was very happy to hear about Senator Reed supporting and introducing legislation on the phase-out, and I can't underscore the importance of the language of that phase-out and how it relates to Rhode Island's energy supply.

There are a number of bills in our State Legislator regarding elimination or phase-out of MTBE, and I think it makes sense for the Federal level to look at that level and to deal with it in a way that doesn't saddle us with other unintended consequences for phasing out MTBE, so I would like to thank the Attorney General's office who are working on that.

There are also a number of other areas that have been noted by our members related to the MTBE. Brown University's Environmental Studies Department is working on a study of the major oil company agreements, franchise and contract agreements related to liability of the, not just the franchisee, but the company itself, and can those agreements be typed up to include and provide for large oil companies having some sort of responsibility for spills like this in these communities and for franchisees or other contract operators like Potter Mobil to be more responsible. So, we are awaiting the results of that study and we will certainly pass that along to the committee when it's available.

I would like to also respond just briefly. I'm very happy to hear some of the responses and comments from Mr. DeBlois, and we certainly agree that responsible operators deserve as much consideration and flexibility as possible. Unfortunately, we do have a few irresponsible operators out there, and this area certainly has been impacted by irresponsible operators. We're very concerned in this case. One wonders if anything can be done as far as regulation of some of these operators. Our members are concerned that Potter Mobil and others can hide behind a series of companies and prevent the collection of moneys related to clean up. One member has referred to it as the sort of Enron of local operators. It is an unfortunate situation and there should be ways in which we can get at these problems so that they're not hiding behind a series of dummy corporations and that there's some financial responsibility to operators who are irresponsible, and, granted, they are the minority. As far as the issues, there are other issues, of course, it's interrelated to our continued dependence on fossil fuels. A number of our mem-

ber organizations are working to promote alternative fuels and tax credits for other use of fuels, and our current energy uses are costly at a number of levels. This incident just points out another level of personal health and quality of life costs that we all pay for when our current fossil fuel distributions and other services go wrong. So I did want to thank Congressman Kennedy for bringing up some of the other aspects, the international trade aspects of this issue, but there are also other costs related to that. We need to keep in mind that the Senators and others making policy, at all levels, keep in mind that maybe we need to move in other directions that are more protected of our economy and our ecology.

Again, it was mentioned as far as no more—mitigation was the word that Mr. DeBlois used on future Pascoag situations. I would hope that it is the wish and desire of all of our members that there be no more Pascoags and that it won't be a mitigation issue. It's something that we together would be able to prevent in the future, and I think your efforts, Senator Chafee and others on the committee and others in our delegation and at all levels in Rhode Island will ensure that there are no more Pascoags. Thank you.

Senator CHAFEE. Thank you very much, Mr. Kos, and I just add that, one important part of this bill is that it would prohibit delivery of fuel to a noncompliant tenant. As I said earlier, certainly that's a great stake to have, to finally give EPA the ability of stop delivery of fuel to noncompliant and put the offenders out of business once and for all.

I just have a couple of questions for Mr. DeBlois. You talk about how your employees now do deal with tanks that—the alarm system that they might have, any training they may have or monitoring. As you said, losing inventory is very damaging for some operating on a thin margin. If your inventory is leaking into the groundwater, leaking anywhere, you're losing inventory and you're losing money. How do you monitor that? Any comment on those questions?

Mr. DEBLOIS. Sure. One of the things that we support in the bill is your requirement in the bill that all operators of underground storage tanks, whether they operate single unit, be a government or be a business or a chain operator like ourselves, that they have a training program in place for all of their employees.

For instance, at our company a sales associate, which is basically the entry level employee, comes in, he or she must go through a 4-week training before they are allowed to operate on their own in the store. As part of that training program, one of the things that they must learn to do is understand what the in tank leak monitor means, how to operate that monitor, and if, in fact, one of those alarms goes off, what to do. As an example of what a training program like that can do, and this is a sad situation, at one of our own facilities in Connecticut 2 weeks ago, an elderly gentleman had a medical problem and came through a stop sign across the street from our location, up onto our facility, hit a car being fueled up by a young woman, knocked the car into the gasoline pump and a small explosion ensued because of the amount of gasoline in the tank's car that was being filled up.

Our operator, by immediately hitting the stop button, stopped all gasoline from flowing and thereby averted a major catastrophe. We

need to have that type of an operation. That training is very, very necessary, because those things don't happen when the manager is there at 2 o'clock in the afternoon. This happened at 9:30 at night. There was a single operator on operating the facility, he was an immigrant, yet, he immediately responded, did exactly what he had been trained to do and averted a catastrophic situation. So, the training component is very important and is needed by everybody. The larger responsible companies typically have those training programs already in place, and that's why we support making them required for everybody. It will be a good thing for the industry.

Senator CHAFEE. Of course, taking the 4-weeks of training, an employee also has a cost component and you just want a level playing field, make sure everybody is doing what you're doing, and that's also what this will require, that kind of training.

So, I appreciate very much your testimony. Scott Rabideau, thank you for your work over the field call in the General Assembly, and we look forward to trying to work with you on legislation down in Washington, and thank you for your testimony.

I'll also note that we referred several times to the GAO report. Once again, I'll say that it's very worthwhile to read, on the back table, the GAO report, which was commissioned last spring and gives a wealth of information on what we can do to prevent spills in the future. I'll also mention that Cameron Taylor from the Environment and Public Works Committee represent Senator James Jeffords is here, and Karen Heckleman from the Environment and Public Works Committee representing Senator Bob Smith in New Hampshire. Thank you. If you have any questions or testimony and you are not able to get to me, certainly Cameron and Karen are here to help, also.

Thank you for your participation this morning, and I look forward to working with you in the weeks and days ahead. Thank you. The meeting is adjourned.

[Whereupon, at 11:31 a.m., the committee was adjourned, to reconvene at the call of the chair.]

[Additional statements submitted for the record follow.]

STATEMENT OF GEORGE E. REILLY, RESIDENT, PASCOAG, RI

PROBLEM ARISES

Sometime in the middle of June 2001, after a fire leveled two houses down the road, I noticed a funny taste and smell to the water we were receiving from the Pascoag Utility District (PUD). At first I thought it to be Chlorine and called the water district to question them about the taste and odor. The water department told me that they had been putting chlorine in the water because they had drained something (I don't remember the word they used) due to the fire. This sounded reasonable to me and so I did nothing further at that time.

About the middle of July I became concerned because the smell and odor still remained, but now it seemed more chemical-like and less like chlorine. At this point I called PUD again and this time they sent someone to test my water. When I called later for the test results, I was told that the State laboratory had said that the water was fine. Again I did nothing further.

By the end of August, I could not take the taste anymore and began using bottled water for cooking and drinking purposes. So I called PUD for the third time complaining about my water. Once again, I was told that the water was free of any bacteria and the State said it was all right. I replied that the water may be free of whatever they were testing for, but if they believed it was all right, then they should come up and have a drink. I was told it would require another test. I don't know if it was ever tested again. I did know that I could not accept PUD's assessment of the water.

Since my wife said that she could not notice anything wrong with the water, I decided to ask some of my neighbors if they noticed anything strange with the water. The first person I talked to said he could not notice anything strange but that his wife refused to even bathe in the water from PUD.

At that point I contacted a private laboratory and was told that it could cost me thousands of dollars to have the water tested, so I turned to the State of Rhode Island. I went to the Department of Health and requested a test of my tap water. What did I want it tested for I was asked. I responded that if I knew what I wanted it tested for, I wouldn't have to have it tested would I. The clerk handed me a yellow price list showing what it cost for whatever test I wanted. I had no clue as to what I needed. The clerk, noticing my dismay, referred me to a rack of pamphlets nearby and told me to see if there was anything there that I might recognize as being the problem. When I read through a number of these pamphlets the only thing that jumped out to me was the MTBE description. It said MTBE was an octane enhancer added to gasoline. My last recollection of the odor was that it smelled a little like the odor you get when riding behind some small pickup trucks, so I told the clerk I wanted the basic test ($79.00) and the test for MTBE ($115.00). He then called a chemist from the laboratory and she came down and handed me the materials that I would need to return to the lab to test my water. However, she said, I would have to wait for her call since the tests were time-critical and since her computer was down. This was on a Monday or a Tuesday. She called on Thursday and told me to take my water samples and bring them down. I did. She told me I would hear within a few weeks of the result. I left. Before that afternoon was out, she called and advised me not to drink the water; nor bathe in it unless I had adequate ventilation in the shower.

She also advised me that the PUD would be notified and that a further testing would be required. On Friday the further tests were taken and PUD was supposed to notify its customers by Saturday that they should not use the water for drinking or cooking. I only found out that the water was unsafe (officially) because my wife happened to see a sign in a store window. The MTBE problem existed for another four and one-half months. I was reimbursed for my expense.

In summary of this section, I believe the problem arose due to: a lack of concern by the PUD (I later learned they had received many calls.), a lack of information as to what problems can arise in a water system, and a lack of resources/resourcefulness by the PUD.

PROBLEM'S CONSEQUENCES

Health problems.—Rashes, respiratory problems and psychological problems have all been reported.

Business problems.—Unable to meet the extra costs for water, at least one business closed. Restaurant and bakeries lost business due to resident fear of contaminated water.

Financial problems.—Many residents forced to travel in order to take baths and/or showers. Some had expensive wells drilled. (I believe that the State is going to reimburse for extra expense caused by the problem, but at the time, no one knew it.)

Weather problems.—Being the fall and winter season, people heating with steam were under a great strain.

Family problems.—Relatives and friends afraid to visit or stay over. (Fearful of contamination) Municipal problems. One village pitted against another over water.

PROBLEM ADDRESSED/NOT ADDRESSED

No immediate help from State. Governor offers coffee.

Charitable contributions start arriving (6 gallons of water per week)

Citizens form action groups. Linda and Robert Monahan form group to keep media and citizens aware.

EPA sends grant. Governor confiscates it. (except to buy a little more water).

Underground Storage Tank Financial Responsibility Fund used to buy temporary filters.

Cindy Jette, Mary Ryan and others bring suit to have contaminated wells shut down.

Judge orders shutdown and orders neighboring village to supply water.

AFTERTHOUGHTS

Why was there such a lack of immediate response or concern by the PUD?

Why did it seem like the PUD was only interested in keeping authority and employment instead of finding a solution to the problem?

Why did the Governor treat the problem in such cavalier fashion?

Why was there so little municipal involvement?

Why did the Underground Fund wait to be asked if it could do something?

Why can businesses such as Potter's (had same type of problem in Warwick) not be subject to criminal negligence?

Why is MTBE still being added to gasoline in Rhode Island? (Some financial benefit?)

Why have not the concerned citizens (the doers) as mentioned above been given a hearty thank you?

STATEMENT OF JAN H. REITSMA, DIRECTOR, RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

INTRODUCTION

Good Morning. My name is Jan Reitsma and I am the Director of the Rhode Island Department of Environmental Management. Thank you for the opportunity to testify this morning on Senate bill 1850, the Underground Storage Tank Compliance Act of 2001. I would like to begin by recognizing Senator Chafee's leadership in drafting and introducing this legislation. After the many tank closures and upgrades associated with the December 1998 deadline for corrosion protection, we have entered a new era in operation and regulation of underground tanks. This legislation establishes the criteria and sets the priorities for the next generation of tanks program.

The site of this hearing is also very appropriate. As we all probably know, Pascoag is the site of the most serious case of contamination by methyl tertiary-butyl ether, or MTBE, in Rhode Island history. The investigation of that contamination uncovered a serious release of gasoline at a facility operating underground storage tanks less than 1700 feet from the sole source of drinking water for the Village of Pascoag. From September of 2001 to January 2002, this village endured the hardships of going without potable water and lived with the anxieties that the health of their families was at risk. Through the hard work of many, many people and various government agencies at the local, state, and Federal level, a replacement source of water was developed. That battle was won, but the war is far from over. The high levels of MTBE remaining in the aquifer and widespread migration of that contamination into the community will take years and hundreds of thousands, if not millions, of dollars to clean up.

PROGRAM BACKGROUND

The use of underground storage tanks is widespread in Rhode Island and across the country. The majority of underground storage tanks are used for the storage and distribution of fuels, including gasoline and diesel fuel. In Rhode Island, there are currently approximately 3,318 registered tanks located at 1,784 locations.

In 1984, the U.S. Congress recognized the need to properly operate and maintain underground tanks and added Subtitle I to the Resource Conservation and Recovery Act. In 1986, Congress acknowledged the need to respond to releases from USTs and amended RCRA to establish the leaking underground storage tank trust fund. The Environmental Protection Agency promulgated regulations for the UST program in 1988. Those regulations set forth the technical requirements for tank installation and operation, established requirements for financial responsibility for owners and operators of tank systems, and set the criteria for approval of State regulatory programs. This system set clear 10-year goals for the upgrade of all underground tanks across the country and provided the framework for an effective partnership between EPA and the States, where the States were given discretion and flexibility on the implementation of the program. This delegation model is often cited as an example of how the Federal and State programs can work together toward a common goal.

The Rhode Island underground storage tank program was formed in 1984 and originally operated as an extension of the water pollution program. In 1993, the Department promulgated the *Regulations for Underground Storage Facilities Used for Petroleum Products and Hazardous Materials* that include specific operational requirements and leak and spill response provisions for USTs. Prior to 1993, the Department relied on the authorities in the *Oil Pollution Control Regulations*, which served as the basis for regulating all oil spills, including leaks from underground tanks.

In 1994, the Rhode Island legislature passed the *Rhode Island Underground Storage Tank Financial Responsibility Act.* That law established a petroleum clean up account funded by a portion of the tax on gasoline sales to help meet the financial

responsibility obligations of tank owners and operators in the state. The *Regulations for the Underground Storage Tank Financial Responsibility Fund*, which outlined procedures for eligibility and procedures to seek reimbursement, were promulgated in January 1997.

The partnership between EPA and DEM, and more recently the Review Board for the Underground Storage Tank Financial Responsibility Fund, has been very effective in Rhode Island. Since the establishment of the program, the program has regulated 8,698 underground storage tanks holding petroleum products. Of that number, 6,942, or 80 percent, have been permanently closed. The remaining tank universe has largely been upgraded to current standards, 98 percent of the facilities with active tanks in Rhode Island meet regulatory standards for corrosion protection and have leak detection systems.

Federal assistance has been a critical component of this effort. Since 1985, EPA has provided over $3,100,000 in funds to support the regulation of underground tank systems. Fees collected from owners and operators of tank systems have supplemented these funds.

LEAKING TANKS IN RHODE ISLAND

Leaking underground storage tanks, as well as other types of spills and releases from these facilities, can cause catastrophic impacts to the environment and the surrounding community. We have all seen and heard the horrible story from here in Pascoag. However, since the start of our underground storage tank program, there have been 1489 releases from underground tanks have been confirmed in Rhode Island. The vast majorities of these releases, 1,117, or 75 percent, have been completely cleaned up. Of the remainder, 112 are subject to ongoing monitoring to ensure that conditions continue to improve. There are currently 369 sites in Rhode Island that either have corrective measures ongoing or require such action.

The impacts of the Pascoag contamination are serious, widespread, and unprecedented in Rhode Island in terms of the impact on people in the community. Over 4,000 people were left without a safe source of drinking water for their homes. Rhode Island has had a history of serious releases, however. One of the earliest spills on record occurred in Richmond, Rhode Island and impacted the water supply for the Canob Park community. Groundwater investigations in this community are documented as far back as 1963, with the earliest suspicions of gasoline contamination documented in 1970. This case drew national attention as it was featured on *60 Minutes* in November 1983 as one of the first serious indications of a deeper problem with contamination from leaking tanks. Years later, a major release at the Hendel's facility in nearby Connecticut seriously threatened one of the water supply wells for Westerly. In 1993, a leak was discovered at the Willie's Texaco facility on the border of East Greenwich and North Kingstown. That spill threatened major supply wells for the Kent County Water Authority, the town of North Kingstown, and the Economic Development Corporation's water supply for the Quonset Point Industrial Park. Fortunately, after great effort and expense, the migration of that contamination was controlled before those water supplies were impacted.

The damage from leaking tanks is not limited to groundwater and water supplies. In 1993, serious leaks at the Coffey's Texaco facility in Newport and the Duva's Texaco facility in Providence caused contamination to flow under nearby buildings and into utilities, and vapors seeped up into these structures. In Newport, the historic Newport County Courthouse was temporarily shut down and ventilation systems were installed to control the vapors. At the Duva's site, a long, difficult battle was waged to control contamination that was seeping into utility lines in the streets. At times, the level of gasoline vapors in those lines reached potentially explosive conditions. In Bristol, a family had to be relocated for over a year when gasoline vapors seeped into their basement from the Serpa's Getty site and in Cranston, a doctor's office was impacted when vapors migrated from the adjacent Speedy Oil gas station. Unfortunately, we are battling the migration of contamination and vapors in Pascoag now as well. Several structures, including a single-family home, have had vapors from gasoline or the individual constituents, such as benzene, detected inside.

Finally, leaking tanks can seriously impact the quality of our environment and our quality of life. When contamination is detected in a community, the anxiety of the residents rises as people worry about the health and safety of their families. Property values plummet when contamination is detected nearby. Contamination can migrate into our natural areas and destroy their value and beauty. In Warwick, gasoline migrated from the Potter's Mobil site and contaminated a wetland area in the center of a residential neighborhood. Not only was the value of the wetland di-

minished, but odors from the contamination caused problems throughout that neighborhood and impacted resident's quality of life until they were controlled.

The costs responding to these releases are astronomical. Since 1987, EPA has provided over $9,500,000 in Federal funding to Rhode Island for response to leaking tanks and support for our leaking tanks program. Since it became operational in 1998, the Rhode Island Underground Storage Tank Responsibility Fund has reimbursed tank owners and operators for $21,248,648 in expenses incurred responding to leaks at 155 facilities throughout the State. We cannot even guess the costs incurred by business in responding to these spills.

THE UNDERGROUND STORAGE TANK COMPLIANCE ACT OF 2001

Many, many things have changed since the underground storage tank program was first instituted. The nation's tanks have been upgraded with systems to protect them against corrosion and overfill. Tank systems have leak detection equipment in place and mechanisms are in place to provide financial assurance for response to spills and leaks. Still, leaks are still occurring and we are struggling to identify the resources to respond to major cases like the one here in Pascoag. New upgraded systems are also much more complex and difficult to operate correctly.

We strongly support what we see as the underlying principle of the Underground Storage Tank Compliance Act of 2001, which is to give States greater flexibility to implement the underground storage tank program, particularly by providing more flexibility in the use of funds to do more proactive work on preventing leaks.

We agree with the specific provision that directs EPA to distribute *at a minimum* 80 percent of the funds appropriated each year from the Leaking Underground Storage Tank Trust Fund. It is our understanding that, on average, EPA has distributed more than 80 percent of the funds appropriated from this account to the States. We applaud EPA for taking that approach and believe it has been effective. Based on the partnership I described earlier, the State programs implement the overwhelming majority of the UST program nationally and it is critical that funds go to the States to continue, and expand, this work.

Historically, States, including Rhode Island, have used funding from the Leaking Tank Trust Fund for corrective action and providing core funding for our leaking tank response program. We have continually faced challenges funding our regulatory program to oversee the operation of underground tanks and effectively preventing leaks. We strongly support the new provisions in this bill that allow States to use funds from the leaking tank trust fund to enforce State or local tank leak detection, prevention and other requirements through State or local programs.

The bill also speaks to the allocation process for distributing funds among the States. Rhode Island strongly supports the allocation process currently being used by EPA.

The bill sets a very clear mandate that all USTs regulated under Subtitle I of RCRA be inspected every 2 years. When we first reviewed this language, we were very concerned that we would not be able to meet this mandate. Preliminary discussions with environmental agencies from other States indicate that we are not alone in this concern. Limitations on staffing and other resources have restricted our ability to inspect tanks in Rhode Island to a frequency of once every 6 to 7 years. While we recognize that this is unacceptable and is not providing the level of protection necessary, we have not been able to build our staff to a level that would allow more frequent inspections. In reviewing this concept over the past few weeks, we believe that an effective alternative may be to license inspectors who conduct the checks and monitoring necessary. We are considering requirements for tank owners and operators to have their tanks inspected by a licensed inspector on a yearly, or biennial, basis and condition operation of the tank system on certification of a satisfactory inspection. We could then use our own resources to audit select stations based on priorities set over time, including risk to water supplies and sensitive natural areas. This is one approach that we are considering in Rhode Island. States have shown a history of being innovators in this program and others and I am sure that many other effective alternatives will also be considered as this bill moves forward. However, for Rhode Island, this will be a very different approach than what is in place right now. We hope the bill will provide flexibility during the transition period when States look to new, innovative ways to meet this goal.

We support the concept of better training for operators of UST systems. We also believe that EPA is well suited to develop guidance on different methods for training operators of underground storage tanks. However, we believe that the guidance should be flexible enough to allow effective and innovative approaches that may be developed by States. Prescriptive requirements on operator training programs may have the unintended effect of stifling innovation and limiting programs to the lowest

common denominator. The bill clearly recognizes the challenges that are faced when developing such a training program and any effective program must be fluid enough to respond to the frequent improvements in tank technology. Furthermore, any training program must be clearly understood and under almost continuous implementation given the turnover rate seen in the automotive fueling business. Given these challenges, the States should have maximum flexibility in developing and implementing a program that meets their needs and the needs of their stakeholders.

The bill allows the Administrator to provide an award of up to $50,000 if the State develops and implements a State operator training strategy. We strongly support the concept of a "reward" for innovation and program improvement.

As we are all aware, controlling and removing methyl tertiary butyl ether (MTBE) from the environment after a release is very challenging. Conventional treatment methods, such as pump and treat approaches and vapor extraction, are difficult to implement due to the high solubility of the compound and the limited effectiveness of activated carbon for capturing the material. In Pascoag, we were treating 200,000 gallons of water per day to remove approximately 1,800 parts per billion of MTBE. The health advisory for drinking water is 40 ppb. Costs were much higher than our original estimates based, in part, on the fact that the carbon filtration units were not as effective as expected for removing the compound and needed to be replaced much more frequently. Also, since MTBE is so soluble in water, it migrates away from the source much quicker than other compounds. This increases the area and complexity of the investigation, and drives up the cost. In Pascoag, the plume of contamination is estimated to cover over 13 acres.

We strongly support the provision in the bill that authorizes a one-time appropriation of $200 million for the remediation of MTBE contamination. We also support the recognition that MTBE contamination threatens the welfare of people who may be impacted. While the various health effects of MTBE are under continual discussion, there is no doubt that concentrations near 40 ppb can render water undrinkable. The taste and smell of this contaminant is distinctive and objectionable and, in many cases, provides the secondary standard driving remediation of these sites.

We support the provision in the bill that provides funding to conduct inspections, issue orders, or bring actions under this subtitle. This section of the bill also requires States to submit to EPA a strategy to ensure compliance of tanks owned by State or local governments with the provisions of the subtitle. In Rhode Island, the State has instituted a program to proactively look at tanks owned or operated by State agencies. With municipalities, we have used a mix of compliance assistance tools and enforcement actions to ensure compliance, with varying levels of effectiveness. This section also allows EPA to provide an award of up to $50,000 if the State develops and implements such a strategy. Again, we strongly support the concept of a "reward" for innovation and program improvement.

SUMMARY AND CONCLUSIONS

In conclusion, we all recognize that the underground storage tank program implemented by EPA and the states have made tremendous progress in controlling the threats of releases Bare steel tanks are largely a thing of the past and the majority of tank systems are equipped to protect them from corrosion, detect leaks in a timely manner, and prevent overfilling. However, these new systems are more complex and difficult to operate. If not run correctly, they can provide a false sense of security without the level of protection they are designed to provide.

We strongly support the underlying principle of the Underground Storage Tank Compliance Act of 2001, which is to give States greater flexibility to implement the underground storage tank program, particularly by providing more flexibility in the use of funds to do more proactive work on preventing leaks.

We hope the bill will provide flexibility during the transition period when States look to new, innovative ways to meet all the goals of this bill. States have shown a history of being innovators in the UST program and I am sure that many new and effective approaches will be considered as this bill moves forward.

Thank you once again for the opportunity to comment on this legislation and thank you once again, Senator Chafee, for your leadership on this issue.

STATEMENT OF HON. SCOTT P. RABIDEAU, RHODE ISLAND HOUSE OF REPRESENTATIVES, DISTRICT 60, BURRILLVILLE

I. HISTORY OF THE PASCOAG FIRE DISTRICT

- Established by Charter in 1887

• Designed to create a self sufficient village by providing fire protection, electric utility service and water
• Roots are found in the history of textile mill communities

II. SUBSURFACE GEOLOGY OF AREA

• Primarily two distinct glacial formations in the Northeast; outwash and till
• Outwash deposits normally follow existing or former river basins
• Volumes of surface water are normally tapped from outwash aquifers

III. WATER RESOURCES OF HARRISVILLE AND PASCOAG

• Branch River Basin Aquifer is the sole source water supply for both villages
• All existing wells draw from outwash formations within this aquifer
• Unfortunately, many thoroughfares also follow the outwash or river basin. Colonial routes always took the path of least resistance along waterways
• Commercial and industrial development in the Northeast is always found along the river corridors

IV. NEED FOR MORE STRINGENT COMPLIANCE FOR UNDERGROUND STORAGE TANKS

MTBE is a water soluble component of today's formulated gasoline
Service stations are historically located along river basin routes throughout the Northeast
Leaking gasoline storage tanks pose extra threats to water supplies since the addition of MTBE
MTBE dissolves in the groundwater and is transported much greater distances than the other components of gasoline
Once introduced to a community water supply the results are devastating

V. PASCOAG'S TRIALS AND TRIBULATIONS

• No potable water for over 140 days
• Skin rashes and other health problems reported
• Loss of business revenue
• Loss of financial equity in homes
• Burden on already short state clean up money

STATEMENT OF ARTHUR J. DEBLOIS III, ON BEHALF OF THE SOCIETY OF INDEPENDENT GASOLINE MARKETERS OF AMERICA AND THE NATIONAL ASSOCIATION OF CONVENIENCE STORES

Good morning, Mr. Chairman. My name is Arthur J. DeBlois. I am president and CEO of DB Companies, Inc., an independent motor fuels marketer headquartered here in Providence. DB Companies own and operate 86 DB Mart stores in Rhode Island, Massachusetts, Connecticut and the Hudson Valley of New York. In addition, we have 84 franchisee-operated locations.

Thank you for inviting me to testify today on issues related to "USTs"—that is, underground storage tanks—and your bill, S. 1850, the "Underground Storage Tank Compliance Act of 2001." I am representing the Society of Independent Gasoline Marketers of America ("SIGMA") and the National Association of Convenience Stores ("NACS").

SIGMA is a national trade association of approximately 260 motor fuels marketers operating in all 50 States. SIGMA members supply over 28,000 motor fuel outlets and sell over 48 billion gallons of gasoline and diesel annually—or approximately 30 percent of all motor fuels sold in the nation. NACS is a national trade association of more than 2,300 companies that operate over 104,000 convenience stores nationwide and employ 1.4 million individuals. Over 75 percent of NACS' member companies sell motor fuels, and the convenience store industry sold more than 115 billion gallons of motor fuels in 2000.

SIGMA and NACS applaud you for holding this UST hearing today in Pascoag and for your leadership on this issue. Through today's hearing, the Associations would like to send a clear and strong message to the residents of Pascoag—responsible petroleum marketers have "zero tolerance" for the kind of release that has contaminated your drinking water supply. We are sorry for the inconvenience you have had to endure these many months. At the same time, NACS and SIGMA have been long-standing and vocal advocates for vigorous enforcement of Federal and State UST regulations. Further, S. 1850 takes additional steps to strengthen UST enforcement and provide more funds to address situations like the one that has occurred here in northwest Rhode Island.

As an aside, I was reminded the other day that Rhode Island has played an interesting, key role in the history of UST regulation. In December 1983, the "60 Minutes" show introduced over 30 million viewers to the problems of leaking tanks. The narrator, Harry Reasoner, detailed the serious groundwater contamination problems in Canob Park, a 9-acre development in Richmond, Rhode Island, resulting from service station tank leaks. The CBS News story was one catalyst that led to the enactment of the Federal tank law in November 1984. Much has been done in the last 18 years to prevent, detect and clean up UST releases. Rather than having history repeat itself, SIGMA and NACS hope that the problems faced today by the residents of Pascoag will lead to prompt action by Congress to improve the current UST program by enhancing the ability of the states to enforce and address tank leaks and spills by expanding their allowable uses of the annual congressional appropriations from the Federal Leaking Underground Storage Tank ("LUST") Trust Fund. As you know, your bill includes over $460 million in new authorizations from the nearly $2 billion and growing—LUST Trust Fund.

In the few minutes that I have been allotted to speak, I would like to make some connections between the situation here in Pascoag and S. 1850—that is, how the enactment of S. 1850 would help to mitigate future Pascoags from occurring. My familiarity with the facts associated with the local MTBE contamination largely is from reading the newspaper accounts. As a result, I am not qualified to address specifics with the Department of Environmental Management ("DEM") investigation and the technical aspects of the remedy. Again, as I said at the outset, NACS and SIGMA's members do not condone the actions of the suspected UST operator before and after the release was detected.

Last May, the General Accounting Office ("GAO") presented you and Senator Robert Smith with a report, "Improved Inspections and Enforcement Would Better Ensure the Safety of Underground Storage Tanks." GAO concluded, in part, that the U.S. Environmental Protection Agency ("EPA") and the states have failed to enforce consistently the UST requirements. GAO estimated that, nearly 3 years after EPA's deadline of the 10-year phase-in (December 22, 1998) for environmentally protective tanks, only 89 percent of the regulated USTs had been replaced, upgraded or closed. GAO identified State and local governmental agencies and very small businesses as the primary categories of UST owners and operators who remain in non-compliance. GAO also indicated that rates for ongoing UST leak detection and compliance are lower than expected.

In its report, GAO recommended steps that Congress could take to address these identified inconsistencies in the existing UST program. NACS and SIGMA have supported, and continue to support, measures that address GAO's recommendations and that are included in S. 1850:

- Authorize the use of LUST Trust Fund moneys by the states for UST enforcement;
- Remove restrictions on the use of LUST Trust Fund moneys by State UST funds, permitting clean-up resources to be deployed faster and minimizing clean-up costs and environmental harm from tank leak;
- Provide additional funds for use by the states in addressing high-priority releases, such as those containing MTBE; and
- Create a national UST data base to track upgraded and closed USTs.

Some persons attending today's hearing may wonder why petroleum and convenience store marketers support effective enforcement of the UST regulations. Let me explain our position. First, small inventory losses become huge financial losses given our slim profit margins from intense competition. Second, since EPA promulgated its UST requirements in 1988, SIGMA and NACS members have spent hundreds of millions of dollars complying with the tank standards. My company spent over $5 million upgrading our USTs. Further, many of our members, including the "moms-and-pops" closed retail locations as a means of compliance. I testified many years ago at a hearing held by the late Senator John Chafee that, with a 10-year phase-in of the requirements, there is absolutely no reason why any UST owner and operator should not be in compliance.

Let me digress a moment and make a point that was best articulated by the late Senator in December 1998 to EPA—that is, there is no justification for EPA or the states to distinguish between private and publicly owned tanks when it comes to protecting human health and environment. A leak from the local public works or fire department's tank causes the same environmental harm as a release from a retail gasoline outlet's UST.

Accordingly, NACS and SIGMA support the key elements of your bill—namely, expanding the allowable uses of the LUST Trust Fund moneys for UST enforcement; requiring every UST to be inspected at regular intervals; directing EPA to publish guidelines for training operators in the proper operation and maintenance of USTs;

requiring EPA and the states to publish strategies for ensuring compliance for USTs owned by governmental agencies at every level; and providing additional funding for the remediation of certain MTBE or high-priority UST releases.

There is one provision in S. 1850 that SIGMA and NACS would like to change. As introduced, your bill limits the use of LUST Trust Fund moneys by State UST reimbursement funds, like the one we have here in Rhode Island, where the UST owner or operator would face financial hardships but for the reimbursement. This provision encourages non-compliance by UST owners and operators. We believe that elimination of this limitation would expedite UST clean-ups and would leverage limited tank remediation funds.

Notwithstanding the experiences of the residents of Pascoag, most UST cleanups are managed by responsible parties—that is, tank owners or operators—and are overseen by State UST implementing agencies—such as, DEM. The UST corrective action program largely has worked extremely well.

State UST reimbursement funds, such as ours here in Rhode Island, have expended more than $5 billion for UST clean-ups over the past decade. According to State data, most state UST reimbursement funds are solvent; however, some of these funds have been paying claims at a faster rate than the revenues they receive. A growing concern from NACS and SIGMA members is that some State legislatures, increasingly strapped for cash, might "borrow" or raid the cash balances in these State UST assurance funds. This occurred here in Rhode Island during the State's last budget "crunch." Cash flow, therefore, remains critical to the success of the State UST reimbursement funds, and allowing a State to use some of its LUST Trust Fund moneys from EPA for its UST reimbursement fund is one way to leverage limited clean-up resources.

There is also a misplaced perception that eliminating the limitation in S. 1850 would send millions of dollars back to the major oil companies. NACS and SIGMA do not believe that to be the case. Most major oil companies were to first to replace their tanks, and likely have received the bulk of any clean-up reimbursements they were owed under the State UST assurance funds. In fact, removing the limitation would benefit Rhode Island's fund and the citizens of the State. The fund here has worked well despite severe funding limitations. According to State data, from late 2000 through the middle of last year, Rhode Island governmental entities placed a tremendous strain on the fund with 11 governmental sites consuming close to 48 percent of the fund's available resources. Additional moneys from the LUST Trust Fund would be a boost to Rhode Island's UST fund.

UST owners and operators are more likely to initiate and complete tank clean-ups if they know that, after they pay the required "front end" amount, the State UST assurance fund will timely reimburse their clean-up expenses. Stated differently, if reimbursements become stretched out over a longer period of time, the UST owner or operator has an incentive to slow down the pace of their clean-ups. Thus, limiting the use of LUST Trust Fund moneys by State UST reimbursement funds will do nothing to maintain the pace of corrective actions.

SIGMA and NACS also feel that removing the limitation also will assist with the clean-up of high-priority releases, such as the one here in Pascoag containing MTBE. If, for example, a small business can avoid significant legal expenses by assigning their clean-up costs to a State UST reimbursement fund, limited resources can be expended on clean-ups, rather than lawyers and consultants.

As a final point, I would like to note NACS and SIGMA members' frustration with the level of LUST Trust Fund appropriations. In many instances, the per-gallon excise tax that funds the LUST Trust Fund is not passed through in the marketplace to the consumer; it is a cost of doing business. However, the LUST Trust Fund now is approaching an unobligated balance of $2 billion, and the current level of appropriations is less than the annual interest earned on the fund, not including the ongoing tax collections. The Government has and is continuing to collect a lot of money for the LUST Trust Fund. S. 1850 recognizes this fact and authorizes a substantial increase in funding. The Associations hope that the key elements of your bill can be enacted and the appropriators agree to increase the annual appropriations.

SIGMA and NACS appreciate this opportunity to present their views on USTs and S. 1850. The Associations regret that Pascoag is the backdrop for this hearing and that the residents here have been inconvenienced from the release that occurred. We look forward to working with you and members of the Senate Environment and Public Works Committee on UST legislation. I hope that NACS and SIGMA might be allowed to testify at a future legislative hearing on S. 1850 in Washington, DC.

I will be happy to answer any questions my testimony may have raised. Thank you, Senator.

UNDERGROUND STORAGE TANK COMPLIANCE ACT

WEDNESDAY, MAY 8, 2002

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
SUBCOMMITTEE ON SUPERFUND, TOXICS, RISK, AND WASTE MANAGEMENT,
Washington, DC.

The subcommittee met, pursuant to notice, at 1:36 p.m. in room 406, Senate Dirksen Building, Hon. Barbara Boxer (chairman of the subcommittee) presiding.

Present: Senators Boxer, Chafee and Inhofe.

OPENING STATEMENT OF HON. BARBARA BOXER, U.S. SENATOR FROM THE STATE OF CALIFORNIA

Senator BOXER. The subcommittee will come to order. We are having a meeting of our Superfund, Toxics, Risk and Waste Management Subcommittee where we are conducting a hearing on S. 1850, the Underground Storage Tank Compliance Act, which has been introduced by the ranking member of the subcommittee, Senator Lincoln Chafee.

Underground storage tanks pose a serious threat to groundwater if they are not maintained and operated properly. In California, we have had experience with just how much damage can be done by leaking underground storage tanks. We will have—is our Santa Monica person here? Thank you for being here. We will introduce you at the second panel. We will hear from the city of Santa Monica, a community that knows first-hand just how devastating leaking underground storage tanks can be.

Santa Monica estimates that the cost to clean up the damage caused by MTBE in leaking tanks will total in the hundreds of millions of dollars, and that is just for one little city. Meanwhile, most of the drinking water wells are shut down. Again, this is just the experience of one city.

There are an estimated 700,000 tanks located throughout the country. Last summer, the GAO issued a report that raises serious concerns about the current program to regulate underground storage tanks. One of the study's most disturbing findings is that as many as 200,000 tanks may not be operated or maintained properly. The threat to drinking water and public health, as well as the immense costs associated with cleanup, cannot be ignored. The question we must ask now is, what do we do about the continuing problem? I want to commend my colleague, Senator Chafee, for

taking a very important step toward addressing what is a very real and serious threat.

Senator Chafee has introduced S. 1850. His bill increases the tools available to deal with leak prevention, compliance and cleanup. The bill increases the funding for underground storage tank cleanup, including setting aside $200 million for MTBE cleanup. I do believe this is a very good start, and I would like to work with my colleague to do more, including further enhancing enforcement tools and increasing the funding levels. The problem with leaking tanks is not going to go away. It will only get worse if efforts are not made to address the problem as recommended by GAO.

So I look forward to hearing from the witnesses today as we look for ways to address this threat to drinking water and public health.

Senator Chafee.

OPENING STATEMENT OF HON. LINCOLN CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Senator CHAFEE. Thank you, Madam Chairwoman, especially for holding this hearing. This is the second one. We did have a field hearing in Rhode Island in my community Pascoag, which did suffer a leak from an underground storage tank which also cost many hundreds of thousands of dollars to clean up, and I would like to thank the EPA for their grant yesterday of $1 million to help toward that cleanup. As the chair said, in Santa Monica, tens of millions of dollars for cleanup, which we could save by of course having a good bill that protected their drinking water from leaking from these underground storage tanks. It is a classic case of an ounce of prevention is worth a pound of cure, or as my grandfather used to say, a stitch in time saves nine.

[Laughter.]

Senator CHAFEE. I look forward to the testimony here. We did have an instance, as I mentioned, in Pascoag, RI where for 4 months, the 1,200 residents were completely out of water. They could not cook. They could not bathe. They could not drink, obviously, for 4 months. So I felt first-hand the ire of people that are affected by this. I would also like to point out, although we are now debating MTBE phase-out, I still think whether that happens or not, of course, this is a good bill, because many of the problems have been associated with MTBE, but nonetheless many toxins are released into the water even if MTBE is phased out over some length of time.

So I look forward to the testimony and I thank you all for coming here this afternoon.

Thank you, Senator Boxer.

[The prepared statement of Senator Chafee follows:]

STATEMENT OF HON. LINCOLN D. CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Good afternoon. I would like to thank Senator Boxer for conducting this hearing on the Underground Storage Tank Compliance Act of 2001. This is the second hearing before the committee on this legislation. I conducted a field hearing in Pascoag, RI on February 25 during which we received first-hand testimony from people affected directly by leaking underground storage tanks about the problems we face when gasoline and MTBE contaminate groundwater.

I would like to provide a brief history of Federal efforts to address underground storage tanks, so we can have a better understanding of what is needed today. In

1984, Congress enacted a comprehensive program to address the problem of leaking tanks. This was in reaction to the discovery of groundwater contamination in different parts of the country and its linkage to underground tanks. In fact, Rhode Island played a leading role in formulating that debate. A 1983 60 Minutes report about leaking tanks in Canob Park in Richmond increased the Nation's awareness about this widespread problem.

The 1984 law imposed minimum Federal requirements for leak detection and prevention standards for underground tanks. In 1988, owners and operators of existing tank systems were given 10 years to upgrade, replace, or close tanks that didn't meet minimum Federal requirements. As the deadline passed in December 1998, many underground storage tanks failed to meet the Federal standards to prevent spillage, overfilling, and corrosion.

To assess the situation, Senator Smith and I asked the U.S. General Accounting Office to examine compliance of tanks with Federal requirements. Last May, GAO concluded that approximately 76,000 tanks have never been upgraded to meet minimum Federal standards. In addition, GAO found that more than 200,000 tanks are not being operated and maintained properly. GAO cited infrequent tank inspections and limited funding among the contributing factors. These problems are real. The Village of Pascoag, RI learned the hard way that the problems GAO outlined are real and have serious consequences. Twelve hundred households were without water with which to drink, bathe, or cook for over 4 months.

In order to assist communities that are grappling with these problems and to prevent such problems from reoccurring, several of my colleagues and I introduced the bipartisan Underground Storage Tank Compliance Act. It requires the inspection of all underground storage tanks every 2 years and for the first time focuses on the training of tank operators. It simply does not make sense to install modern, protective equipment if the people who operate them do so improperly. The bill also provides the Federal Government and States with the tools necessary to ensure that all parties are meeting Federal standards. In addition, the legislation emphasizes compliance of tanks owned by Federal, State, and local governments, and provides $200 million for cleanup of sites contaminated by MTBE.

I would like to quickly address the issue of MTBE. During the energy debate, the Senate spent a lot of time debating the phase-out of MTBE and the use of ethanol. I would like to clarify that S. 1850 is independent from that effort. Assuming Congress phases out MTBE, we must still fix the tanks so that ordinary gasoline does not spoil our environment.

I am looking forward to hearing from our witnesses. The testimony we received at the field hearing certainly provided unique insight into the problems we are facing, and I know today's panelists will do the same. I would like to especially welcome Art DeBlois from the DB Companies in Rhode Island, who is testifying today on behalf of SIGMA and NACS. Art, thank you for being here today. I would also like to extend my appreciation to Marianne Horinko for testifying today and for yesterday's $1 million grant, which EPA provided to Pascoag, RI to continue the MTBE cleanup. The money is very needed and very welcome.

Senator BOXER. Thank you.

Senator Inhofe.

OPENING STATEMENT OF HON. JAMES M. INHOFE, U.S. SENATOR FROM THE STATE OF OKLAHOMA

Senator INHOFE. Thank you, Madam Chairwoman.

First of all, I am pleased that we are having this subcommittee hearing and I am also pleased to be a cosponsor of Senator Chafee's S. 1850. To date, the Federal Leaking Underground Storage Tank Trust Fund Program has been a success both in my home State of Oklahoma and across the Nation. According to recent EPA estimates, approximately 90 percent of the petroleum USTs in the Nation have been upgraded to comply with Federal standards. This is certainly a success story, particularly when compared to other environmental cleanup program, that the work is not done yet.

I support S. 1850 because it will allow States to use Federal funds to enforce the Federal UST standards. I support this bill because it will require Federal and State agencies to bring their

USTs up to Federal standards or close them. I support the bill because it will authorize additional funds to be appropriated from the LUST Trust Fund.

I ask unanimous consent that my whole statement be made a part of the record.

Senator BOXER. Without objection.

Senator INHOFE I want to add one thing, Madam Chairwoman. I think it is significant that we at some point arrive at the point that there is a problem. We do not want MTBEs in our drinking water leaking in. We do not want ethanol in there either. I think the answer, and I have always thought the answer, is to do it with an upgrade as suggested in this legislation. So I do support you, Senator Chafee, and I look forward to passing this legislation.

Now, I have to say, Madam Chairwoman, that we are marking up our Defense authorization bill at this moment, so I am not going to be able to stay here.

Thank you very much.

[The prepared statement of Senator Inhofe follows:]

STATEMENT OF HON. JAMES M. INHOFE, U.S. SENATOR FROM THE STATE OF OKLAHOMA

Thank you, Madam Chairwoman. I am pleased that the subcommittee is conducting this hearing today on Senator Chafee's underground storage tank reform legislation—S. 1850. I am a co-sponsor of this important legislation and I look forward to the testimony of the witnesses at the hearing today.

To date, the Federal Leaking Underground Storage Tank Trust Fund program has been a success, both in my home State of Oklahoma and across the Nation. According to recent EPA estimates, approximately 90 percent of petroleum USTs in the Nation have been upgraded to comply with Federal standards. This is certainly a success story, particularly when compared to other environmental clean-up programs, but the work is not yet done.

I support S. 1850 because it will allow States to use Federal funds to enforce the Federal UST standards. I support this bill because it will require Federal and State agencies to bring their USTs up to Federal standards or close them. And I support S. 1850 because it will authorize additional funds to be appropriated from the LUST Trust Fund.

It astounds me that the Federal LUST Trust Fund has a balance of almost $2 billion and yet we are appropriating less than $75 million each year for this important program. I strongly support increased appropriations for this program so that additional funds can be provided to the States for their continued effective and efficiency administration of this important environmental program.

I know a lot of discussion today will villainizing MTBE. I think the elimination of MTBE may be a case where we better be careful what we ask for, because we might get it. Now, while I tried to make the fuels provision of the Energy bill better, I still have concerns with that package. Among my concerns is the virtual elimination of MTBE. I would observe that S. 1850's provisions are the solution to gasoline contamination that would make an MTBE ban unnecessary—at least in a world where the facts mattered. Simply stated, if we fix the tanks and thereby improve the handling of gasoline, it makes no sense to then ban a single fuel additive among the many gasoline components that may leak. Indeed, EPA's own Blue Ribbon Panel—the study that arguably launched the interest in this legislation—bluntly stated, "The major source of groundwater contamination appears to be releases from underground gasoline storage systems." Furthermore, if these tanks are not improved, we could start to find ethanol in our water as a result of the ethanol mandate. Again, banning fuel additives is not the answer to our water contamination problems, but rather it is the leaking tanks that must be addressed.

Thank you, Madam Chairwoman, for calling this hearing. I hope this committee will act expeditiously on S. 1850 shortly after the conclusion of this hearing.

Senator BOXER. Thank you so much.

Our first witness today is Ms. Marianne Horinko. She currently serves as Assistant Administrator for the Office of Solid Waste

Emergency Response at EPA; also, our second witness on this panel, John Stephenson, currently serves as Director for Natural Resources and Environment at the GAO. We are going to set the clocks for 5 minutes in the hopes that we can move it along just because we have a lot of witnesses.

So, Ms. Horinko, welcome.

STATEMENT OF MARIANNE HORINKO, ASSISTANT ADMINISTRATOR, OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE, U.S. ENVIRONMENTAL PROTECTION AGENCY

Ms. HORINKO. Thank you, Madam Chairwoman, Senator Chafee. Thank you very much for this opportunity to be here today and discuss S. 1850, the Underground Storage Tank Compliance Act of 2001.

I will briefly today highlight some of our program accomplishments before I turn to the new challenges that we face. With your permission, I would ask that my written testimony be submitted for the record.

Eighteen years ago, Congress responded to the growing problem of leading underground petroleum tanks by enacting Subtitle I of the Resource Conservation and Recovery Act, or RCRA. EPA, States, tribes and the private sector responded to Congress' mandate by working together to clean up leaking tanks and prevent future leaks. Through this strong partnership, we have made significant progress in protecting the public from underground storage tank problems. I would like to highlight some of our mote noteworthy successes.

When this program was first established, there were over 2 million tanks, many of which were bare steel and corroding. Together, EPA and the States have safely closed nearly 1.5 million of these substandard tanks. By doing so, these tanks can no longer contaminate our drinking water, groundwater or soil. Together, we have cleaned up about 270,000 leaking tanks, nearly 65 percent of all leaks. Together, we have gotten virtually all tank owners to upgrade their tanks and install leak detection equipment. And proudest of all, because of this effort, the number of new leaks has sharply declined from about 30,000 in 1998 to just over 6,500 last year.

Although we have made significant progress, our work is far from finished. One of our toughest challenges is indeed MTBE, both preventing new releases and cleaning up existing MTBE contamination. This is a significant undertaking, especially in communities like Long Island, Santa Monica, Lake Tahoe and Pascoag, RI, who have lost some or all of their drinking water due to MTBE contamination. We are working closely with these and other communities to answer their technical questions about MTBE and in some cases provide financial support.

MTBE is not our only challenge. Although we have made great strides cleaning up underground tanks, we still have 150,000 releases that need to be cleaned up. The States are committed with us to clean up these releases as quickly as possible. Together, we are working on an initiative to accelerate cleanups through voluntary multi-site agreements, performance-based cleanups, and risk-based decisionmaking.

We are also looking at our cleanup challenge with an eye toward making contaminated land available for re-use. And one of our greatest redevelopment opportunities is old abandoned gas stations. That is why we created USTfields, with 10 pilots already under way and another 40 pilots to be announced this spring. These pilots are just the beginning. Our Nation's new brownfields law includes greater opportunities and money to clean up and redevelop old gas stations and other abandoned petroleum sites. The President's fiscal year 2003 budget doubles the current funding for the brownfields program. We are very excited and appreciative about the opportunity our new brownfields law presents to marry environmental results with community revitalization.

In addition to these efforts, we must also prevent future leaks through greater compliance. Although we have made considerable progress by getting most tank owners to install better equipment, we must now make sure this equipment is being operated properly. The MTBE challenge makes this even more important. We are working closely with States on creative ways to improve compliance through third-party inspectors, multi-site compliance agreements, more intensive training for State inspectors, and better guidance to gas station owners and operators so they know how to maintain their equipment and know what to do when a problem occurs.

Finally, over the past couple of years, we have learned that despite our best efforts, some leaks are coming from new and upgraded tanks. To get a better handle on the sources and cause of these leaks, we have been working closely with States, universities and industry, and some trends are emerging. Although today's underground tanks are much better than older tanks, some tough problems remain. Many problems are caused by human error, such as failing to operate leak detection equipment correctly or prevent spills and overfills during delivery.

But leaks from pipes dispensers and in some cases the tanks themselves are also a cause for concern. More work needs to be done to fully understand the source and causes of these problems, and more importantly, to identify appropriate remedies.

Despite all of our efforts, we can do better, and I am pleased that S. 1850 includes a number of provisions that can help us improve our underground tank program. For example, allowing the LUST funds to be used for inspections and compliance activities will give added flexibility to EPA and States to direct our resources to the most pressing needs. Similarly, the bill's focus on MTBE is both timely and appropriate, as is the focus on increasing inspections and improving training.

As with any bill, there are provisions that need further clarification or may have some unintended effects, and we would be pleased to work with you and your staff to discuss these issues in more detail.

In summary, Madam Chairwoman, Senator Chafee, we are very pleased with the significant progress that we have made in closing substandard tanks, improving compliance, and cleaning up releases. Nevertheless, we do have a lot of work ahead, particularly in light of the challenge that MTBE poses. I look forward to working with you and other members of this committee to address the work before us.

Madam Chairwoman, this concludes my testimony. I will be happy to answer any questions.

Senator BOXER. Thank you.

Mr. Stephenson.

STATEMENT OF JOHN STEPHENSON, DIRECTOR, NATURAL RESOURCES AND ENVIRONMENT, U.S. GENERAL ACCOUNTING OFFICE

Mr. STEPHENSON. Madam Chair, Senator Chafee, I am here to discuss GAO's report on EPA's Underground Storage Tank Program issued to this committee last year. I think you will find that our report suggested improvements to the program are consistent with Senate bill 1850 being discussed at today's hearing. This legislation is timely because reports of drinking water contamination from gas stations continue to mount.

For example, one pollutant, MTBE, a fuel additive to reduce emissions, has been found in numerous drinking water supplies across the Nation, as you are well aware. MTBE contamination poses serious health risks ranging from nausea to kidney or liver damage, and potentially even cancer. To help prevent such problems, Congress in 1984 established the UST Program to protect the public from potential leaks from the then-more than 2 million tanks across the Nation.

Under the program, tank owners were required to install new leak detection equipment by the end of 1993, and additional equipment by the end of 1998. If these conditions were not met, owners had to close or remove their tanks. Congress also created a trust fund in 1986 to help cover cleanup costs. The trust fund is replenished through a 1/10-cent per gallon gasoline tax, and at the end of fiscal year 2001, the fund had a balance of about $1.7 billion, and Congress was appropriating about $70 million a year from that fund.

Our report addresses three issues: the extent tanks were in compliance with program requirements, how States were inspecting tanks and enforcing requirements, and whether upgraded tanks were still leaking. The information they now report is based on a survey we conducted of all 50 States and the District of Columbia. Here is what we found. About 1.5 million tanks have been permanently closed since the program began, leaving about 693,000 active tanks. About 89 percent of these tanks were in compliance with equipment requirements at that time. As seen in the first chart here, compliance levels vary from State to State. The darker the color, the lower the compliance rate, and in the black States here, we did not have enough data to make a conclusion about compliance.

Now, 89 percent is a fairly good compliance rate. However, we found that almost 30 percent—more than 200,000 tanks—were not being operated and maintained properly, thus increasing the chances for leaks. Indeed, 15 States reported that leak detection equipment was frequently turned off or improperly maintained. The EPA and the States speculated that the remaining 11 percent, or 76,000 non-compliant tanks were probably inactive. However, our study showed that it is extremely important to address closed

or abandoned tanks because they may continue to pose health risks.

I should point out that these statistics are often based on best guesses because many States do not inspect their tanks often enough to have definitive information on compliance rates. In fact, we found that over half the States do not meet the minimum inspection rate recommended by EPA of at least once every 3 years. This second chart shows inspection rates by States, with the States not meeting EPA minimum depicted in gray and black.

We also found that most States can levy citations or fines, but that only about half have the authority to prohibit fuel deliveries—probably the most effective tool for ensuring compliance with program requirements. This last chart simply shows in white the States with the authority to prohibit deliveries, and the gray States to not.

Finally, we found that some tanks, despite being upgraded with the required equipment, may continue to leak. Thirty-four States reported the potential for such leaks. At the time of our review, EPA and some localities had studies under way to assess the extent tanks were still leaking. In addition, EPA was at the time considering whether tank requirements needed to be upgraded, such as mandating double-walled tanks.

To address the problems highlighted in our report, we recommended improved training, better inspections and enforcement, and special attention to tanks not yet upgraded, closed or removed. We also suggested that Congress consider expanding use of the trust fund to include inspection and enforcement activities in addition to clean up. By my reading, S. 1850 is consistent with these recommendations.

Madam Chair, that concludes my statement. I will be happy to answer any questions.

Senator BOXER. Thank you. If you could give us about 6 minutes each for questions, please. Thank you.

Ms. Horinko, you said that you were pleased with the progress. I am not pleased with the progress so let's start from there. And that is why I think this bill is so important, and I want to even make it broader. I think the GAO has good ways to do that. You have not taken a position, the Administration, on the bill. When do you think you would?

Ms. HORINKO. I do not have a precise data, Madam Chairwoman, but I would be happy to look into that and get back to you. I am able to say that many of the bill's provisions are very helpful and we certainly support the general tenor and direction of the bill.

Senator BOXER. How about the money—spending the amount of money the Senators are working toward, which eventually reach—I believe it is $200 million. Is that correct? How about that part of it?

Ms. HORINKO. Certainly, I support the President's budget, which is consistent with the enacted levels of the program over the last number of years.

Senator BOXER. I was asking you, do you support the levels of funding that Senator Chafee is suggesting, which as you know is a whole big jump from that, because of the size of the problem.

Ms. HORINKO. It certainly is, Madam Chairwoman, and——

Senator BOXER. I am asking what is your view on that—the Administration's view on spending that type of resource on this problem in our country.

Ms. HORINKO. Certainly, it is important to spend a significant amount of our resources on addressing this challenge of MTBE, and we currently are, and the President's budget supports that level——

Senator BOXER. Wait a minute. You say that you are spending sufficient resources now on the problem.

Ms. HORINKO. We are spending sufficient resources in light of all the competing priorities.

Senator BOXER. OK. Well, let's put that into context for the people. You are spending $73 million. That is your proposal. How much is in the trust fund?

Ms. HORINKO. I believe $1.7 billion.

Senator BOXER. Correct. So the trust fund which is set aside specifically for cleaning up tanks, has $1.7 billion. You are suggesting $73 million, and in your opinion that is adequate.

Ms. HORINKO. It is certainly adequate, Madam Chairwoman, given all of the competing challenges that we have to face.

Senator BOXER. Wait a minute. That fund is specifically—a trust fund—am I right, Mr. Stephenson?—to clean up these tanks.

Mr. STEPHENSON. Right. For cleanup purposes.

Senator BOXER. Isn't that what it is for?

Mr. STEPHENSON. Yes.

Senator BOXER. Can the money be used for other competing challenges?

Mr. STEPHENSON. I do not believe so.

Senator BOXER. No, it cannot. So what are you saying? You are saying that you support $73 million out of a $1.7 billion trust fund that is sitting there not being used, and you say that is adequate. Well, I couldn't disagree with you more on the point, and from what I gather, you are going to write us as to whether or not you support this bill, but you have just said that the President is spending enough. So clearly, you do not support the funding formula in that bill. Is that correct?

Ms. HORINKO. Well, we would be pleased to work with you on the appropriate funding level, Madam Chairwoman. I would note that this is the same funding level that Congress has enacted for the past 4 years.

Senator BOXER. I am not being critical only of you, but you are advising us. You have the budget first. We react to the budget. Now, obviously Senator Chafee and I are going to work very hard with the Congress. That is not—that is our job to do. What I am asking you is what the Administration's position is in terms of a $1.7 billion trust fund. You have been clear—it is $73 million, and you want to work with me on the funding levels. I suggest you work with Senator Chafee, because I believe we need to do more since that is the point of the trust fund.

I think the American people who live near this and the people of Santa Monica who have lost—is it half their drinking water supply?—half their drinking water supply. Senator Chafee has constituents that it closed down a town. And you are sitting on top of

a trust fund you cannot spend the money any other way. You can't. You are not supposed to.

Ms. HORINKO. Well, Madam Chairwoman, if Congress in its sole discretion decides to change the funding for the program, we will certainly be pleased to direct it to the——

Senator BOXER. That is not the issue. This bill is an authorizing bill that will put into law a new way of funding that will not leave it to the discretion of either you or us. It is going to say it is a formula base. So you cannot get out of it that way. The President will either have to sign the bill that we are going to pass, I hope, or veto the bill. So we need to know if the President believes that it is right to have a $1.7 billion trust fund for which you have taxed us in a box—if he thinks it is right, when the problem, as Mr. Stephenson defined it, and I just want to make sure I understand. It looked to me like he said there were 200,000 banks that had problems. Is that correct?

Mr. STEPHENSON. That were not being operated or maintained properly, even if they had the equipment installed.

Senator BOXER. Right. I loved your idea, which I do not know if Senator Chafee has it in his bill, that you could use some of the funding in the trust fund for enforcement and inspection. It is in his bill.

Mr. STEPHENSON. It is in there.

Senator BOXER. This is very important because under this Administration, the enforcement teams have been cut way back, so they do not have enough to do anything else, let alone this, because they have cut it back, and that is the priorities.

So this, to me, is important. Speaking of promises made, I still have not heard from you on the number of Superfund sites that are not going to be cleaned up, and you pledged in front of this committee to tell us. When can I expect that? I want to know what sites are not going to be cleaned up.

Ms. HORINKO. Madam Chairwoman, I believe that my staff provided yesterday a current list of sites that are currently under consideration.

Senator BOXER. I want to know what sites are not going to be cleaned up. We know the list of what is going to be cleaned. We know you are pulling back the number that was promised, and I believe it was 60—you gave us 47. Are we to assume the others are not being cleaned up?

Ms. HORINKO. The list that we gave you, I believe Madam Chairwoman, and I will need to check on this, is the list of sites that are potentially under consideration for funding decisions this year. We have not made those final decisions yet.

Senator BOXER. When are you going to make the decisions on Superfund cleanup?

Ms. HORINKO. There are two checkpoints, Madam Chairwoman. We give the money out as the year rolls on because construction needs——

Senator BOXER. Well, there are 4 more months left of this year.

Ms. HORINKO. We have one more checkpoint in May, and then actually there is a congressionally mandated holdback of $100 million to September 1. So in August, we make the decision as to how that final $100 million will be allocated among our sites. So on Sep-

tember 1, we will have a firm decision as to what the final cleanup decisions are this year.

Senator BOXER. Well, this is unacceptable to us, and we will not take the time of Senator Chafee's hearing now, but we need to get the documents. We need to know what sites are not being cleaned up and we need to know them right away. Now, yesterday I interviewed this very nice young man, Mr. Suarez, who is going to become Deputy Assistant Administrator for Enforcement. And he said he would do everything in his power to get us those names. Now, I need to tell people in communities, I say to my friend, who are expecting Superfund cleanup whether it is going to happen or it is not going to happen.

I have to just say there is such a pattern in this Administration of simply not letting us know what is happening. I have served under a lot of presidents; been here a long time. I have not seen this before. I need to know. I need to tell people if they are going to have Superfund cleanup or they are not.

So again, I reiterate that what you gave us is not adequate. What we will do is take what you gave us and we will send you personally a letter saying what is missing from here. But just to sum up on the leaking tanks, again, I cannot praise my colleague enough for recognizing the fact that nobody is doing enough on this—the Congress, the President. But that this particular proposal this year, given the fact that there are 200,000 problem sites, is woefully inadequate. I look forward to working with you on your bill.

Senator Chafee.

Senator CHAFEE. Thank you, Madam Chairwoman.

If you think the Chairwoman is angry, you should have stood in front of the 1,200 people in Pascoag, RI that could not drink or cook. So it is a very, very important issue.

I am curious just—your statement had so many favorable comments about the bill, yet it did not endorse it. Of course, ultimately, I would like to have the President's signature on it. It is not going to become law without it. What can we do? Where is the opposition to the bill? What can we do to improve it in order to get a favorable recommendation from EPA and, significantly, from the Administration?

Ms. HORINKO. Senator Chafee, my comments indeed reflect the fact that the Administration is very positive about many of the things that the bill does, particularly, flexibility in how we spend the money, that we can direct the trust fund money toward inspections, toward compliance, the focus on MTBE, which is indeed one of the greatest challenges facing the program. Those are all very positive things.

The things that we have concerns about are indeed very minor. For example, the bill does require EPA and the States to put out a large number of guidance and regulations on very short timeframes, and we would like to work with you and your staff to see if we can perhaps provide some more reasonable timeframes for getting those regulations and guidance in place. Similarly, the bill does place a few restrictions on our ability to take compliance and enforcement actions, and we would like to work with you to make

sure that we are as free to take those enforcement actions as we feel we need to be in the States as well.

But overall, the Administration is very positive about the steps that the bill is taking in terms of attacking the new challenges that we face, particularly the MTBE contamination. We would be pleased to sit down and work with you about some of our concerns and how we can best address the funding constraints that we are facing dealing with the budget, both here in the Administration and on Capitol Hill in balancing all of the competing, the many pressing environmental priorities that we all face.

Senator CHAFEE. Well, thank you very much. I am sure we will be working with you on that.

Did your statement reflect those concerns? I know your entire statement was submitted for the record.

Ms. HORINKO. Yes, it does.

Senator CHAFEE. OK, very good. Certainly, as Mr. Stephenson said in his statement, the ultimate enforcement is to prohibit delivery. We have had the instance in Rhode Island where it was a chronic abuser, and we knew there were problems with a service station, but without the hammer of being able to prohibit delivery of gas, the problem kept going on and on. So this is an important part of the bill is to have that element. I should think that would help EPA a lot to have that. Is that true? When you say one of your concerns is working out some of the timetables on enforcement, is not that ultimately extremely helpful to have this aspect of the bill?

Ms. HORINKO. Senator Chafee, the data that we are seeing so far in this delivery prohibition or red-tag provision is that this is indeed a very powerful tool, a very powerful incentive for owners and operators to maintain compliance. Some 20 States, I believe, have this red-tag authority. They are finding it to be a very powerful tool. In extending that to all of the States as well as Federal EPA would indeed be in fact a powerful incentive for owners and operators to stay in compliance.

Senator CHAFEE. Thank you very much.

Mr. Stephenson, thank you very much also for the report, first of all, and for your testimony. You didn't seem to have any opposition to the bill—am I accurate in that?

Mr. STEPHENSON. Yes.

Senator CHAFEE. Well, very good.

Thank you, Madam Chairwoman.

Senator BOXER. Thank you so much.

Ms. Horinko, I understand the city of Santa Monica is concerned that the oil companies and other responsible parties will not ensure a high enough level of cleanup in Santa Monica, given all the damage that has been done. What will EPA do to ensure Santa Monica's concerns are addressed in terms of the level of the cleanup?

Ms. HORINKO. Madam Chairwoman, I have personally been briefed on the Santa Monica cleanup during my trip to EPA's regional offices in San Francisco, and my regional project managers and regional attorneys are involved at a very hands-on level. In fact, it is unusual for Federal EPA to be involved this directly in an underground tank cleanup as the approach that we are taking

with respect to the Santa Monica contamination. So my folks in Region IX are very concerned that we do the highest possible quality cleanup and that we do as much as we can to protect the drinking water in Santa Monica. I am proud to report that Region IX is probably our leading region in terms of enforcement capabilities and statistics. So you are being guarded by the best and the brightest of EPA's enforcement folks, and they will really keep a firm hand on the till.

Senator BOXER. Could you get back to me on what EPA will do to ensure Santa Monica's concerns are addressed in terms of the level of the cleanup?

Ms. HORINKO. I will get back to you in writing on that.

Senator BOXER. Thank you. Thank you very much, because we really would like to have that in writing.

I want to thank both of you. I do not have any further questions, and I want to say to Mr. Stephenson, you did a tremendous public service with your work. I feel that, you know, there is an old expression, since we putting a lot of old expressions out, you know, what you don't see can't hurt you, but boy, these tanks—I mean, we are talking major hurt. So what you did was important and pointing out again to us that there is this trust fund. There isn't a money problem because there is a trust fund, and that is what it is there for. And for us to sit back and spend a tiny portion of that, and then say we are pleased, I just don't buy that. Maybe there are some members of Congress who feel that way. I hope now, because I think Senator Chafee, and with Senator Inhofe's support and my support, I mean, my potential support, I think we really have a chance to build a coalition and make a difference. So thank you both very much.

We ask the next panel to come up—Mr. Craig Perkins, who is director of Environmental and Public Works Management for the city of Santa Monica in my home State; Mr. Grant Cope, staff attorney with the U.S. Public Interest Research Group; Kathleen Stiller, subcommittee chair for the Association of State and Territorial Solid Waste Management Officials. Ms. Stiller is with the Delaware Department of Natural Resources and Environmental Control in New Castle, DE. Mr. Arthur J. DeBlois III, president and CEO of DB Companies, Inc. in Providence, RI. He is appearing on behalf of the Society of Independent Gasoline Marketers of America and the National Association of Convenience Stores. Mr. Roger Brunner—is he here? Well, then I can't say it, he is not here. But if he does get here, he is the profits center manager at Zurich North America, East Lansing, MI.

As I told Senator Chafee, I may have to duck out here for another hearing. I will stay as long as I can to hear all of you. So why don't we start with—I would love to have Santa Monica, and then if I have some questions, maybe I could ask them, and then I will turn the gavel over.

Mr. Perkins, welcome.

STATEMENT OF CRAIG PERKINS, DIRECTOR OF ENVIRONMENTAL AND PUBLIC WORKS MANAGEMENT, CITY OF SANTA MONICA, CA

Mr. PERKINS. Thank you. On behalf of the Mayor and the City Council of the city of Santa Monica, I want to thank you for the opportunity to give testimony today.

First, I would like to share with you the key lessons we have learned from our rather painful experiences with underground storage tanks and MTBE in Santa Monica. We are a city of nearly 90,000 permanent residents and over 200,000 daily visitors. The city depends heavily on groundwater for our drinking water supply. After many years of effort, by 1995 we had been able to maximize the use of local groundwater supplies and achieved 70 percent water self-sufficiency, and this is in a semi-arid climate. By using our sustainable local water resources, we were able to reduce our reliance on increasingly scarce imported water from northern California and the Colorado River.

This all changed in 1996 when Santa Monica was hit with a drinking water catastrophe caused by MTBE. Within a 6-month period in 1996, MTBE forced Santa Monica to shut down most of its water wells. These wells accounted for one-half of the total daily supply in Santa Monica and we must now import more than 80 percent of our drinking water, putting further strain on California's already fragile water supply system. The effects of MTBE, as you well know, can be devastating. Once released from a tank or a pipeline, MTBE travels quickly and readily dissolves in water, unlike the other chemicals in gasoline. MTBE has an uncanny ability to find its way into drinking water wells. Although gasoline has been around for decades, it is only the relatively recent addition of MTBE that has caused widespread water contamination in Santa Monica and elsewhere.

MTBE acts swiftly. Once discovered, MTBE levels in the city's wells rose more quickly than any other water contaminant we had ever encountered. MTBE strikes at the heart of public confidence in the safety of drinking water supplies. People will not drink water that smells and tastes like turpentine, nor should they.

S. 1850 is a step in the right direction toward stricter oversight of underground storage tanks and freeing up additional financial resources to facilitate inspection, enforcement and corrective actions. However, based on our real-world experience in Santa Monica, we believe that S. 1850 should go much farther in some key areas. First, the allocation of $200 million for corrective actions related to MTBE releases is far less than what will be needed to clean up the MTBE mess nationwide. The project cost just to clean up Santa Monica's main well field is over $200 million. Current estimates for total cost of nationwide MTBE cleanup are around $30 billion.

Clearly, the cost for remediation of MTBE and other water contamination must ultimately be paid for by the polluter. But unfortunately, those companies responsible for causing the MTBE pollution in Santa Monica and many other communities have not yet stepped forward to do what is right. Until they do, significant financial assistance will be required to start the cleanup process. Second, let's make sure that we are doing everything that we can

to keep underground storage tanks from leaking in the first place. Even the newest underground storage tanks leak, and the leaks are often not in the tank itself but in the piping that connects the tank to the fuel dispensing systems. A primary focus in S. 1850 needs to be placed on inspection, training, and enforcement. Too often in the past, operators of underground storage tanks have been able to act irresponsible because the threat of enforcement was remote or entirely nonexistent. Let's make sure that the tools and resources are in place so that noncompliant tanks are taken out of service and the public and the environment are better protected.

Finally, nothing in S. 1850 should preclude Santa Monica, any State or any other local government from seeking legal redress, taking legal action or adopting regulations and performance standards with respect to underground storage tanks that are more stringent than Federal law. S. 1850 should ensure that all storage tank installations at Federal facilities are subject to the same requirements as everyone else. S. 1850 should provide a floor, but should not hamper State or local governments from their efforts to protect human health and the environment, or pursue polluters.

If S. 1850 incorporates these stronger provisions as suggested, it can become a very significant tool, not only to begin the cleanup of existing MTBE contamination, but to prevent future storage tank leaks as well. The two irrefutable facts that have emerged from Santa Monica's odyssey as the poster child of MTBE water contamination are, first, underground storage tanks leak; and second, it is extremely difficult to get polluters to pay for the cleanup of their pollution.

Please strengthen this bill so that we will all have a better chance of not repeating the mistakes of the past, and we need to create better options, which is what this bill is about.

I thank you for the privilege of testifying here today.

Senator BOXER. Mr. Perkins, I want to thank you and use the privilege of the chair and the agreement from my ranking member to ask some questions, then turn the gavel over.

I just want to thank you for your very focused testimony. Unfortunately, again California leads the way to this place—we did not want to. For example, we have two very well-known disasters from leaking tanks. Santa Monica is one, and Lake Tahoe is the other. Have you ever seen Lake Tahoe? You know magnificent it is. Well, we are looking at a minimum of $50 million to clean up Lake Tahoe; $200 million to clean up Santa Monica. The GAO report said that in California, the estimate is that between 20 percent and 70 percent of tanks are in compliance, so that is a big jump, but even if it is as low as 30 percent not in compliance, you are talking about huge numbers of potential catastrophes here.

So let me just say, Mr. Perkins, that on this legislation where I am going to work very closely with my colleague and friend, and we do work closely on environmental issues, I am so glad that the three of us are here right now so that we can have this conversation. I just want to make sure I present what happened in Santa Monica in the right way.

First, we have a town here that was 70 percent self-sufficient in drinking water. I am sure you could tell the same story, but in

California, this is unheard of, in the south. It is all—water is imported because it never rains down there and it is just not done that often. And so to see them go from being 70 percent self-sufficient to now probably 100 percent not self-sufficient or close——

Mr. PERKINS. Yes, less than 20 percent.

Senator BOXER [continuing]. Less than 20 percent—from 70 percent to 20 percent is just a tragedy. We want to avoid that for other communities, because God knows we do not have enough clean drinking water anyway. So that is the first thing, so your bill is so important if it has that vision of getting to these problems before they erupt.

Second, this MTBE nightmare of traveling fast, and being so astute at finding the point of least resistance to get into the water supply, the fact that it is so expensive to clean up—I want to work with my colleague on this because it seems to me that we might want to work together on a formula that says we will go up to the number you picked—you picked a $200 million number—or 75 percent of what is in the trust fund if the President deems an emergency with drinking water. In other words, the money is there. It is a question of how much we tap that fund. So if there was a way to leave the door open perhaps to tap that fund up to perhaps, I say 75 percent because you do not want to use the whole fund up. You want to save some for new emergencies. So that is a thought I have.

You do address inspection, training and enforcement in the bill, is that correct? Which is excellent. I think that Mr. Perkins makes a point that as far as he is concerned, this is a major issue because if you take the tanks out of service, if you do a good enforcement, you find that instead of being cavalier about it, then you remove the problem. So that is really important. I do not think you do anything to stop legal redress, but that is important. I don't think you do anything on that. Is that—you are silent on that. So that is not an issue in the bill.

So I just want to thank you very, very much, and I just had one question, dealing with my question to Ms. Horinko. Are you fully satisfied with EPA in the region, that they are holding the responsible parties' feet to the fire in terms of the level of cleanup? Or do you have some concern? Was I off the wall in asking that question, or was it right to ask the question?

Mr. PERKINS. That is a very good question. We waited a long——

Senator BOXER. What, the question that I asked her? Or the question I am asking you about the question I asked her? OK.

Mr. PERKINS. Both are important.

Senator BOXER. Good.

Mr. PERKINS. We waited a long time for people to do the right thing in Santa Monica, meaning the people that caused the pollution. We worked with oil companies and tried to reach a voluntary settlement. That did not happen. We filed a lawsuit about a year and a half ago. Within the last 6 months, we made a critical decision in terms of how we were going to move forward. What we decided is that we were not going to wait for the oil companies or the EPA to decide what was in our best interests in terms of how to clean up our water. We were going to take control of the situation ourselves. We are moving forward with a plan for designing and

permitting and building a treatment facility which will treat all of the water in the groundwater basin, not just part of it which is what the oil companies wanted to do, and we will treat it faster, rather than waiting for years and years and years, which is the cheapest way for the contamination to be cleaned up. If we do not do that, what we are going to get is the path of least resistance, the path of the least impact on the bottom line of the polluting companies, and Santa Monica does not find that acceptable. So we are going to take control of our destiny and make sure it is done right. The EPA does not necessarily agree with that right now, but we are moving forward.

Senator BOXER. So the EPA does not necessarily agree with that, is what you are telling me.

Mr. PERKINS. That is right.

Senator BOXER. But you are working on them?

Mr. PERKINS. We are doing what needs to be done, regardless.

Senator BOXER. OK.

Mr. PERKINS. We have the authority to do that.

Senator BOXER. Which is your point you made to Senator Chafee about making sure that we do not do anything unwittingly in the bill that would cause us to do a lesser cleanup. I think that is important.

Well, let me just say, as soon as I receive the letter from Ms. Horinko, and I hope she does it faster than she did the one on Superfund, but we will work with her. We get that letter outlining what they are doing to ensure the highest level—can I share it with you? At that point, if she does not come in where you are coming in on this, I will take it up with them because I do not want you out there having to pay all this, and to be out all this, because it is not right. So we will work together.

I want to thank my colleague for writing this bill, for focusing our attention on this important issue. I am real proud to serve with him, and I will turn over the gavel to you, and do not take too much advantage of it, Mr. Chafee.

[Laughter.]

Senator BOXER. Let's not hold an election for who is going to be the committee chair and all that right now. I have your word.

Senator CHAFEE. You do.

Senator BOXER. OK, then I trust you. Very good.

Senator CHAFEE. We are of the opposite parties, after all.

Senator BOXER. That is right. Keep that in mind.

Senator CHAFEE. What was the cleanup cost, before I go on with the rest of the panel, when you say to implement this cleanup that you wanted to do that was in some dispute with EPA? What is the cost? In your testimony it was $200 million, you said that?

Mr. PERKINS. Over $200 million, and that is essentially a conservative estimate. The treatment facility will have to operate a minimum of 20 years in Santa Monica, and we are hoping it is only 20 and not 40. It is hard to say.

Senator CHAFEE. How will you pay for it, just out of curiosity?

Mr. PERKINS. We do not know. We are hoping that by the time it is ready to be constructed, about 2 or 3 years down the road, that we will have money from the companies that caused the pollution, but we will have to cross that bridge when we are at that point.

Senator BOXER. And from your bill.

Senator CHAFEE. Yes, that will help.

Senator BOXER. Which will be the law.

Senator CHAFEE. Can you pinpoint the guilty party? Have you done that?

Mr. PERKINS. This is probably perhaps the scariest element in our experience. In our main well field, what we did is we drew a 1-mile radius around the well field. Within that 1-mile radius, we found 22 separate gasoline stationsites that had documented releases of gasoline over the previous 10 years. So in narrowing down those potential candidates, we now have a list of about 10 to 12 sites within a 1-mile radius of our well field, and those are the most likely sources of the contamination. In one of those sites, we believe that as much as 50,000 gallons of gasoline leaked before the leaks were stopped.

Senator CHAFEE. In one of them?

Mr. PERKINS. Just one site.

Senator CHAFEE. It sounds to me like the guilty party.

We will move right on with Mr. Grant Cope, staff attorney for the U.S. Public Interest Research Group. Welcome, Mr. Cope.

STATEMENT OF GRANT COPE, STAFF ATTORNEY, U.S. PUBLIC INTEREST RESEARCH GROUP

Mr. COPE. Thank you, Senator Chafee.

I would like to thank the committee for holding a hearing on S. 1850 and for examining the issues related to improving the leaking underground storage tank program.

I will address three issues today. First, I will briefly outline the main threats posed by leaking underground storage tanks. Second, I will highlight the main areas where Federal legislation is needed to increase protections against these threats. And third, I will discuss how S. 1850 incorporates, fails to incorporate, or could potentially weaken key protections.

First, leaking underground storage tanks present a serious threat to public health and environmental quality. States and EPA acknowledge that leaking underground storage tanks are the No. 1 potential source of groundwater contamination in the country. Of course, 50 percent of the country relies on groundwater for drinking water, and virtually 100 percent in some rural areas do as well.

The main contaminant leaking from underground storage tanks is gasoline, which actually has about 150 chemicals in it, including benzine and toluene. Benzine is a recognized carcinogen and reproductive and developmental toxicant. Toluene is a recognized development toxicant and is suspected of also adversely impacting the cardiovascular system, immune system, respiratory system and reproductive systems.

Congress amended RCRA to create the Federal Underground Storage Tank Program to address these types of threats. After 20 years, available data demonstrate that the program is not adequately dealing with the threats caused by leaking underground storage tanks. U.S. PIRG supports Federal legislation that increases protections against pollution from leaking underground storage tanks.

Such legislation should include five key points: strengthening Federal and State enforcement authorities; increasing the frequency and thoroughness of inspections; a waiver of Federal sovereign immunity at facilities; augmenting existing resources for the UST programs; and vigorously incorporating the polluter pays principle. Conversely, U.S. PIRG opposes legislation that weakens existing protections, including EPA's authority to order cleanups of contamination. U.S. PIRG would urge the subcommittee to consider modifications to certain aspects of S. 1850 that fail to maintain or increase protections for public health. I will highlight five key areas right now. No. 1, S. 1850 could constrain EPA's authority to issue cleanup orders. U.S. PIRG opposes such constraints. Leaking underground storage tanks represent a threat to public health. The subcommittee should not sanction constraints on EPA's ability to protect the public from dangerous contamination.

No. 2, U.S. PIRG supports S. 1850's requirement to increase the frequency of inspections. However, consistent with the information contained in GAO's 2001 report, S. 1850 should require periodic physical inspections of tanks. This is critically important.

No. 3, U.S. PIRG urges the subcommittee to incorporate an unambiguous waiver of sovereign immunity related to penalties and order authority at Federal facilities. Federal facilities put the same cancer-causing materials into the tanks as do private citizens. Therefore, they should be subject to the same penalties and cleanup provisions as are private citizens.

No. 4, U.S. PIRG urges the subcommittee to actually increase the resources going into the Leaking Underground Storage Program. S. 1850 contains decreasing authorization in later years and this is contrary to the needs of the program as outlined in the GAO report. To the extent that GAO is holding resources in reserve that could and should be spent to increase protections currently, we would also vigorously urge the subcommittee to direct EPA to do so.

No. 5, U.S. PIRG supports the polluter pays principle as a tool for creating disincentives for pollution, conserving limited public resources, and shifting costs onto entities that are closely associated with contamination. The U.S. PIRG opposes sections of S. 1850 that could prohibit EPA cost recovery actions or result in polluters paying decreased penalties. After 20 years, tank owners and operators should understand that if the tanks leak dangerous contamination, EPA can and will hold them accountable.

In conclusion, we look forward to working with the committee to increase protections against one of the greatest threats to the Nation's groundwater supplies, that of leaking underground storage tanks.

Thank you.

Senator CHAFEE. Thank you, Mr. Cope. That is why we have hearings, to hear constructive criticism. Thank you, the point is very well made.

Now we will hear from Ms. Kathleen Stiller, Delaware Department of Natural Resources and Environmental Control. Thank you, Ms. Stiller. Welcome.

STATEMENT OF KATHLEEN STILLER, DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

Ms. STILLER. Good afternoon. My name is Kathleen Stiller and I am representing the Association of State and Territorial Solid Waste Management Officials. I will focus on four issues of special importance to State program managers in my summary remarks. I ask that the subcommittee accept our full written testimony for the hearing record.

Senator CHAFEE. Without objection. Ms. Stiller. The first issue is funding. While S. 1850 represents increased workloads for States and does authorized increased funding, it does not necessarily appropriate increased funding. Without the increased funding, States would be unable to do the work. Even with increased funding, given State revenues, personnel restrictions and hiring freezes at the current time, there are some concerns that we may not be able to do the work.

The second issue is inspections and enforcement. The bill requires that inspections every 2 years be done for every facility. This may not be practical for all States. In fact, States may find that increased inspections with increased followup and enforcement have a positive impact on compliance rates and the severity of violations. However, they would like the option to schedule inspections dependent on the location of the tanks by a priority system, that those tanks in areas that are more environmentally sensitive and pose more risk to human health or public safety be inspected more frequently than those of a lower risk.

States need the flexibility to use all the enforcement tools provided in this bill and in other statutes that States have. The incentives in performance appear to limit somewhat the use of some enforcement tools for States by requiring that they consider the compliance history of the violator. The States would like to have that enforcement authority without restrictions.

Red-tagging is something that States generally support as being added as an option for enforcement tools. However, we need to recognize that some States need to do legislative or regulatory changes to obtain that authority, and this provision should not be linked nor should any of the provisions be linked to program approval for States. Many States have just an equivalent program, although they do not have a program approval from EPA.

The third issue is operator training. This is a resource-intensive program, given the turnover rate of operators for facilities. States should be required to provide this training. Such options as third-party providers would be beneficial, and States do recognize this is as important aspect of the program and would help the prevention aspects of the Underground Storage Tank Program. However, we would like the flexibility to design a program such as a third-party provider with a certification that the operator has attended the training, to allow the flexibility of delivery and also the flexibility of funding, as it is often difficult for States to introduce new fees and obtain new funding for programs that require resources.

Our fourth and final issue is MTBE. This is a groundwater cleanup issue in States and they are handling it with regard to the cleanups. The funding in this bill will help with some cleanups.

However, as we heard from the gentleman from Santa Monica, it may not cover many of the sites we have out there. We need to ensure that the entire UST system is designed to prevent releases, not just the part of the system that routinely contains product, as this has been seen to be an issue in many States.

In closing, while States agree that increased inspections followup enforcement and operator training will positively impact compliance rates, resources are needed to support these efforts. States also see a need for prioritization of inspections based on the environmental sensitivity of a site and the type of tanks at a site. A prioritization system would allow States to focus their resources on areas of concern to the State, rather than meeting a blanket requirement. Further, States are concerned that even if resources are provided, current restrictions at the State level may inhibit the use of the resources to meet the inspection and operator training requirements.

Thank you for requesting our testimony regarding this important legislation. I would be happy to respond to any questions you might have regarding our views.

Senator CHAFEE. Thank you very much, Ms. Stiller.

Welcome, Mr. DeBlois from the great State of Rhode Island, representing the National Association of Convenience Stores and the Society of Independent Gasoline Marketers.

STATEMENT OF ARTHUR J. DEBLOIS III, PRESIDENT AND CEO, DB COMPANIES INC., REPRESENTING THE SOCIETY OF INDEPENDENT GASOLINE MARKETERS OF AMERICA AND THE NATIONAL ASSOCIATION OF CONVENIENCE STORES

Mr. DEBLOIS. Thank you, Senator, other members of the subcommittee.

My name is Arthur J. DeBlois. I am the president of DB Companies, Incorporated. We are an independent petroleum marketer based in Providence, RI. We operate 86 DB Marts in a four-State area—Rhode Island, Massachusetts, Connecticut, and the Hudson Valley in New York. We also have an additional 84 franchise operating units.

Thank you for inviting me to testify today on S. 1850, the Underground Storage Tank Compliance Act. As you indicated, I am representing the National Association of Convenience Stores, NACS, and the Society of Independent Gasoline Markets of America, or SIGMA. NACS and SIGMA have been longstanding and vocal advocates for vigorous enforcement of all Federal and State underground storage tank, or UST, regulations.

With respect to Federal and State regulations of petroleum USTs, NACS and SIGMA have three key objectives: first, ensure that an adequate percentage of funds appropriated from the Leaking Underground Storage Tank Trust Fund, or LUST Fund, is delivered to the State UST programs for proper regulatory enforcement and remediation assistance; second, ensure all UST owners and operators, including governmental agencies, commercial operators and Native American tribes, are held to the same standards as the industry and comply with existing UST regulations; and finally, to facilitate the prompt remediation of releases from USTs.

NACS and SIGMA support key elements of your bill, S. 1850, because the bill is consistent with these objectives. According to the Bush Administration's fiscal year 2003 budget, the LUST Trust Fund will have a balance at the end of 2002 of just over $1.9 billion. Trust fund tax collections this year from people such as myself will be over $193 million, and the fund is going to earn an additional $113 million in interest. Despite this huge balance, the Bush Administration has followed the policy of previous Administrations and is only calling for an appropriation of $73 million for fiscal year 2003. This is less than the amount of interest earned by the fund.

Given the media attention to UST leaks over the past 5 years, which has focused particularly on MTBE contamination of groundwater, the continued level of low appropriations from the trust fund is inexplicable. NACS and SIGMA urge this committee to use its influence to increase substantially the fiscal year 2003 appropriations from the LUST Fund. Previous witnesses this afternoon have detailed the May 2001 GAO study and its recommendations. NACS and SIGMA support fully those recommendations and note that many of them are reflected in your bill, S. 1850.

The legislation is supported by a bipartisan group of cosponsors—Senators Jeffords, Smith, Inhofe, Reed and Warner—and if enacted, would lead to important reforms in the Federal LUST Fund program. These are, require a minimum of 80 percent of the funds appropriated from the trust fund be delivered to the States; permit States to use the trust fund moneys to enforce the 1998 UST deadline; require all regulated USTs to be inspected every 2 years; and require States to develop UST operator training programs based on EPA guidelines. I think Ms. Stiller's idea of having these administered by third parties or certified people in a company is a great idea. Also require States and Federal agencies to submit to EPA a strategy to ensure that all tanks operated by Federal, State and local governments comply with existing regulations; require EPA to issue regulations to authorize EPA or the States to prohibit deliveries of fuel into noncomplying tanks. We are in favor of red-tagging. In fact, Massachusetts, as you are aware, has a compliance system that allows you to do that. Authorize $200 million for the remediation of MTBE releases and authorize a total of $460 million in appropriations from the trust fund.

NACS and SIGMA strongly support S. 1850 with one suggested amendment. We consider this amendment to be very important in achieving the goals of the legislation, that is to ensure strong enforcement and quick remediation of UST leaks. As introduced, S. 1850 limits the use of LUST Trust Fund moneys by State UST reimbursement funds to situations where the UST owner or operator would face financial hardships but for the reimbursement. I can tell you unequivocally this provision encourages noncompliance by UST owners and operators. We believe that elimination of this limitation would expedite UST cleanups and would leverage the limited tank remediation funds currently available at the State level.

There is a misplaced perception that eliminating the limitation in S. 1850 would send millions of dollars back to the major oil companies. NACS and SIGMA do not believe this is the case. In most instances, the major oil companies were the first people to replace

their tanks to the 1998 requirements. Quite frankly, they have received the bulk of any moneys that would be due them under the State insurance funds for the cleanup expenses that they have incurred.

UST owners and operators are more likely to initiate and complete tank cleanups if they know that after they pay the deductible amount of the up-front fee, they are going to receive timely reimbursement for their cleanups. Stated differently, if reimbursements become stretched out over a longer period of time, the UST owner or operator has an incentive to slow down the pace of their cleanups. I am personally aware of marketers in our industry who have made just such a decision because of the uncertainty of timely reimbursement and the company's cash-flow constraints. Thus, limiting the UST LUST Fund moneys by State reimbursement funds will do nothing to maintain the pace of corrective actions.

NACS and SIGMA appreciate this opportunity to present their views on USTs and S. 1850. We look forward to working with the committee on UST legislation and urge the committee to move this bill expeditiously. I would be happy to answer any questions my testimony may have raised.

Thank you.

Senator CHAFEE. Thank you very much, Mr. DeBlois.

Mr. Brunner, welcome.

Mr. BRUNNER. Thank you, sir.

Senator CHAFEE. Mr. Brunner represents the Profits Center and is the manager.

STATEMENT OF ROGER BRUNNER, PROFITS CENTER MANAGER, ZURICH NORTH AMERICA

Mr. BRUNNER. Ranking Member Chafee, my name is Roger Brunner and I serve as a vice president with Zurich North America Specialties Business Unit. Zurich North America is a unit of Zurich Financial Services Group, the third-largest provider of property and casualty insurance in the United States.

My role in the organization is the management of our business that provides environmental insurance for petroleum storage tanks. Today, Zurich North America is the leading provider of storage tank environmental insurance in the United States, insuring tens of thousands of petroleum storage tanks, which is significantly more than any other private insurer. We have been insuring petroleum storage tanks for leakage for approximately 10 years and we have paid to clean up thousands of leaking underground and aboveground storage tanks. Therefore, legislation that impacts the operations and risk management practices of petroleum storage tanks significantly impacts our business.

I am here this afternoon to voice support for the passage of the Underground Storage Tank Compliance Act of 2001, Senate bill 1850. The highly efficient localized storage and delivery of petroleum is currently a fundamental component of our American lifestyle and economy, and we expect localized petroleum storage to continue for the foreseeable future. Because the delivery of petroleum as a fuel source is such a highly efficient, low-margin business for petroleum distributors and represents such a low-cost product for businesses, public entities and consumers, we some-

times lack respect for the extreme complexity required for safely operating our petroleum storage and delivery system. In short, we take it for granted.

It is truly amazing that his volatile and potentially dangerous liquid can be extracted from deep beneath the surface of our planet, transported across the planet, processed in highly technical refineries, then transported, blended and stored locally. Even more amazingly, this vital product is then sold to organizations and individuals for comparatively less than a comparable amount of your favorite fountain soft drink. The combination of the low-cost storage and delivery of petroleum and the potentially significant damage by petroleum releases to human health and the environment create the need for Senate bill 1850.

This legislation is important. We believe that it will improve the environmental safety of the local storage and delivery of petroleum. Unfortunately, our experiences demonstrate the need for this bill. Too often, inadequate training procedures or technical appreciation for complex monitoring devices leads to otherwise avoidable petroleum leaks. For example, last week, I reviewed a case in the mid-Atlantic with my claims department that involved a petroleum retail location that had not appropriately tracked their inventory and did not know that they were missing over 10,000 gallons of fuel. Imagine if this operator really understood and executed the requirements expected if it stopped the release at 100 gallons instead of 10,000. The environmental contamination would have been limited, the damage would have been limited, and thousands of dollars, hundreds of thousands of dollars in cleanup costs would have been saved.

Or in a classic example of the need for enhanced training, I highlight the case in the Midwest where a local operator taped up the miscalibrated electronic release detection system that kept flashing and making noises. Apparently, this complex electronic system had issued earlier false warnings and was viewed somewhat like the boy that cried wolf once too often. Unfortunately, when the piping joint came apart for the system and there was a real release, no one paid attention until it was too late.

The last personal observation I will cite is a hospital in the Southeast that was not sure who was responsible for keeping track of the compliance obligation for its generator's diesel tanks. Because the hospital's mission is patient care, their priority was naturally to make sure just simply that the tank was full in case fuel was needed due to a power outage for their emergency generator. This important and quite expected priority on patient care, and the lack of focus on storage tank compliance, missed the fact that a long, slow petroleum leak was occurring, thus causing significant environmental damage.

Each of these examples are real-life claims submitted to Zurich North American. Each was the result of poor training compliance programs, and a significant amount of damage caused by each was avoidable.

That is why we believe that Senate bill 1850 if enacted will have a significant impact on the risk management practices of petroleum tank operators in the United States. By requiring and funding storage tank system compliance inspections at least every 2 years and

improving the training of regulated facility operators, Senate bill 1850 will go a long way toward ensuring a better prepared and more technically proficient operator base. As a significant stakeholder, we believe that this is an appropriate utilization of the LUST Trust Fund.

Zurich North America urges immediate passage of this legislation. We believe that as long as local storage and delivery of petroleum are part of the fabric of our lives, environmental problems will occur. However, we believe that over several years, the implementation of Senate bill 1850 will help reduce the number of underground storage tank-related environmental and human health problems and it will be even more effective in reducing the severity of these problems that do occur in the future.

I applaud you for introducing such legislation and I look forward to working with you in the weeks and months to come.

Senator CHAFEE. Thank you very much, Mr. Brunner.

You have all been very terrific at contributing to this bill. Now, we go forward on it. I don't really have any questions. I would just ask Mr. DeBlois, is that on the frontlines with the people, hiring the people, I know it is an industry that traditionally has a great deal of turnover. I know DB Marts probably less so than your competitors, but what is it like to have the employees come in who are going to be in charge of listening to these bells and whistles that might go off if there is a leak, and making sure that they do the right thing, even if the funds are there, in a business that might have more turnover than perhaps others, of employees. Your testimony did not cite that as a hardship for your industry, but I am just curious as to what that would be like.

Mr. DEBLOIS. I think Mr. Brunner's point is well made, and the requirement for a training program. Most of the responsible operators today, Senator, already have some type of a training program. Quite frankly, the industry would welcome a standard set of guidelines that would lay out exactly what people believe the appropriate training mechanisms are going to be, and input from people like Zurich or others that are familiar with the devices is very welcome. We have no problem with the training program. We do it with our employees. It is costly. We do have turnover. But before somebody gets behind a cash register in one of our locations, they have basically gone through about 2 weeks of training not only on just how to operate the store, but what the equipment in the store is.

You have to realize that when I put a manager and an employee behind a counter, I am giving them control of an asset that probably has a price tag on it between land, buildings, equipment and everything of well over $1 million. So it is in my best interest to make sure that it is being properly operated. But things like Mr. Brunner cites do happen, and a training program I think that is industry-wide and required by everybody will go a long way toward helping the industry. But more importantly, it is going to help the hospital, the local fire department, the commercial operator whose job it is not to do that, so they tend not to pay attention to the devices that they had to put there, even though they have got a significant investment in them.

Senator CHAFEE. Very good. Thank you very much all for coming some long distances. The testimony is very appreciated.

The hearing is concluded.

[Whereupon, at 3:14 p.m., the subcommittee was adjourned, to reconvene at the call of the chair.]

[Additional statements submitted for the record follow:]

STATEMENT OF HON. BOB SMITH, U.S. SENATOR FROM THE STATE OF NEW HAMPSHIRE

I want to express my gratitude to the Chair for holding this hearing and to the witnesses for sharing their expertise with the committee today. I especially want to thank my friend from Rhode Island, Senator Chafee, for his strong leadership on the issue of underground storage tanks. In 2000, Senator Chafee and I asked the General Accounting Office (GAO) to assess the current Underground Storage Tank program and the level of compliance with Federal standards. What GAO found, outlined in a report released 1 year ago this month, was that among other deficiencies, only 71 percent of tanks were operated and maintained according to standards. In response to the GAO report, I joined Senators Chafee, Inhofe, Jeffords and Carper in introducing S. 1850—the subject of today's hearing. This bill responds to the many deficiencies identified in the GAO report. S. 1850 takes several needed steps to help Federal, State and local officials to clean up and prevent further contamination caused by leaking underground storage tanks. The bill increases inspections and training, with an emphasis on compliance. It also provides the funding necessary to meet the new requirements set out in the legislation. S. 1850 will help to ensure that our groundwater will not become contaminated because of inadequate maintenance or operation of the Nation's underground storage tanks. It my hope that this hearing will give this legislation the boost it needs to move through the legislative process.

The bill also addresses a specific type of gasoline additive contamination that has hit New Hampshire hard—MTBE. This bill provides $200 million to clean up MTBE contamination. Having visited with a number of families and small business owners who have suffered from MTBE pollution, I can tell you that these resources will go a long way to rid many of the MTBE nightmare. I am grateful that this provision has been included in the bill. I know that Senator Chafee's home State of Rhode Island has also suffered from MTBE contamination, and we will be hearing from a witness today describing their battle with this gas additive. By ensuring better compliance and improved underground storage tank integrity, we will reduce the amount of MTBE that will find its way into our water. But we need to go further and ban MTBE. This committee and the Senate have done just that. Both this Congress and last, this committee has passed my legislation that would ban MTBE and cleanup contamination caused by the gas additive, without backsliding on air quality. I was very pleased that the energy package the Senate passed recently included my bill to deal with MTBE. It is my hope that the House of Representatives will agree to ban this substance. It is important to my constituents in New Hampshire and to the entire Nation that the poisoning of our groundwater stops.

S. 1850 also provides the opportunity to pass a narrow, but important petroleum liability provision. While currently not included in the bill, this provision would be helpful to spur cleanup and redevelopment where contamination does exist. I look forward to working with my fellow cosponsors, and all members of the committee, in exploring this additional provision.

Once again, I want to thank the Chair for holding this hearing and I look forward the testimony of our witnesses.

STATEMENT OF MARIANNE LAMONT HORINKO, ASSISTANT ADMINISTRATOR, OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE, U.S. ENVIRONMENTAL PROTECTION AGENCY

Good morning Madam Chairman and members of the subcommittee, I am Marianne Horinko, EPA's Assistant Administrator for the Office of Solid Waste and Emergency Response. I am pleased to appear today to discuss S. 1850, the Underground Storage Tank Compliance Act of 2001, identify some of the challenges facing the Underground Storage Tank (UST) Program, and describe work EPA has undertaken to address those challenges.

BACKGROUND

In 1984, Congress responded to the increasing threat to groundwater posed by leaking USTs by adding Subtitle I to the Resource Conservation and Recovery Act (RCRA). The statute directed EPA to develop a comprehensive regulatory program for USTs storing petroleum or certain hazardous substances to protect the environment and human health from UST releases. EPA's 1988 regulations set minimum standards for new tanks and required owners of substandard tanks to upgrade or close them. The regulations addressed a variety of other requirements including those related to leak detection and cleanup of releases when they occur.

In 1986, Congress created the Leaking Underground Storage Tank (LUST) Trust Fund to provide a stronger funding base for the cleanup portion of the underground storage tank program. The LUST Trust Fund provides money for EPA to help administer the program nationwide and implement the program in Indian Country. In 1998, Congress also created explicit authority for EPA to provide LUST funding to federally recognized Indian tribes. The majority of the LUST Trust Funds are provided to the States to oversee cleanups, take enforcement actions at leaking tank sites, and undertake State-lead cleanups when a responsible party cannot be found or is unable or unwilling to remediate a site which presents a threat to public health and the environment. EPA provides approximately 81 percent of the annual LUST Trust Fund appropriation to the States. Since the inception of the LUST Trust Fund, States have received approximately $790 million.

Since its inception in the mid-1980's, EPA's UST program has developed an extremely effective partnership with States to implement the program. From the outset, this program was designed to be implemented primarily by States. In general, all States implement an underground storage tank program using grants and cooperative agreements from EPA. Twenty-nine States, Puerto Rico and the District of Columbia have been formally approved by EPA to operate their UST programs in lieu of the Federal UST program. EPA retains the authority to implement and enforce the State's UST program in authorized States and to implement and enforce the Federal program in unauthorized States. EPA implements and enforces the program in Indian Country where EPA works closely with Indian tribes. EPA continues to work with other States to help them have their programs formally approved. In many respects, the successes achieved by this program are due to partnerships, not only with States and tribes, but also with the private sector. We believe the UST program's effective partnerships can serve as a model for other programs.

PROGRAM PROGRESS

As EPA established the UST program, it faced some unique challenges including the immense regulated universe of over 2 million USTs. Many of these USTs were old, made of bare steel, and subject to corrosion. Since the inception of the program, EPA and the States have made substantial progress. Over 1.5 million substandard USTs have been closed. As a result of the closures, these UST systems are no longer sources of additional contamination. There are now approximately 705,000 active USTs, nearly all of which have the required leak detection and prevention equipment. Additionally, States report that approximately 75 percent of these USTs are operated and maintained correctly.

EPA and States have made substantial progress in cleaning up releases from leaking USTs. Since the inception of the program, approximately 419,000 petroleum releases from USTs have been reported. Much progress has already occurred in cleaning up releases. Cleanups have been initiated for 379,000 (over 90 percent) of these releases and cleanups have been completed for about 269,000 (approximately two-thirds) of the releases. This represents a tremendous amount of work and success by the States, tribes, EPA, responsible parties and cleanup contractors. Among the major factors affecting this success are the cleanup funds States have established. These funds, which raise and expend approximately $1 billion annually, pay for the vast majority of site assessments and remediation each year.

We have also made considerable progress reducing the number of new releases. Since 1990, the number of new releases reported annually has averaged approximately 30,000. In fiscal year 2001, the number of new releases reported dropped to approximately 6,500. While this represents a dramatic improvement, it is still too many.

PROGRAM CHALLENGES

While substantial progress has been made since the mid–1980's, there are additional challenges that still need to be addressed. First, while many releases have been cleaned up, there are still approximately 150,000 where the cleanup has not

been completed including releases with methyl tertiary-butyl ether (MTBE) contamination. Second, there are hundreds of thousands of abandoned USTs, many of which have had releases that need to be addressed. Third, while USTs have been improved and generally are operated and maintained properly, approximately 25 percent of the UST systems still need to be brought into compliance and all UST systems need to be operated and maintained properly so that once they are in compliance, they remain in compliance. And finally, while UST systems are greatly improved and the number of new releases has dramatically reduced, there are still releases from new and upgraded systems.

The first challenge is the large number of releases—150,000—that are not yet cleaned up. While substantial progress has been made on many of these releases, there still is an immense amount of work that remains to be done to increase the pace at which cleanups are completed, and reduce and ultimately eliminate this backlog of releases.

The vast majority of regulated USTs contain petroleum products that contain toxic substances, such as benzene, toluene, and naphthalene. Therefore, releases from USTs may pose both human health and environmental risks. Further, the presence of MTBE makes the challenge of cleaning up these releases more difficult, because MTBE is more likely to reach groundwater than other petroleum constituents, and once it does, can make the water unpotable due to its unpleasant taste and odor.

MTBE contamination has affected communities across the country. For example, the city of Santa Monica, CA has faced a massive loss of a significant portion of its drinking water supplies due to MTBE contamination caused by failures of UST systems. Lake Tahoe has faced similar problems. In Long Island, New York, MTBE contamination has resulted in alternate or improved water supplies having to be provided for over 160 affected public and private wells. Pascoag, RI, while smaller in size than Santa Monica, Lake Tahoe or Long Island, has also lost its water supply. More recently, attention has turned to a release in Roselawn, IN. In this case, the source of the release, which may be from an UST system, has not yet been identified.

MTBE contamination from all sources, including USTs, is fairly widespread. A 2001 U.S. Geological Survey study found that MTBE was detected in 9 percent of community water systems in 10 States, although generally below EPA's drinking water advisory value. A national study by the New England Interstate Water Pollution Control Commission in 2000 found that most States detect MTBE at 60 to 80 percent of leaking UST sites. Based on an analysis of data from 31 States, a report in Environmental Science & Technology (May 2000) estimated that up to 9,000 community water supplies in those 31 States may be threatened by MTBE contamination.

The second challenge we face is finding, removing and, where necessary, cleaning up abandoned USTs. The General Accounting Office (GAO) estimated there are approximately 200,000 abandoned USTs at brownfields sites. In addition, there are many abandoned USTs at sites that have not been designated as brownfields sites. The workload associated with abandoned tanks, many of which have not yet been found, probably exceeds that of dealing with the backlog of known release sites that have yet to be cleaned up.

Preventing releases before they occur is the best way to protect human health and the environment. The remaining challenges focus on preventing and rapidly detecting releases before they become problems.

The third challenge involves compliance with the UST regulations. In a recent report, Improved Inspections and Enforcement Would Better Ensure the Safety of Underground Storage Tanks, the GAO estimated that approximately 29 percent of USTs were not operated or maintained properly. While the vast majority of USTs have the proper equipment, proper operation and maintenance remains a considerable challenge. Owners and operators of USTs normally have many responsibilities which compete with the time necessary to properly operate and maintain their UST systems. The challenge here is to help all owners and operators to achieve compliance and maintain it through ongoing proper operation and maintenance of their UST systems. We will do this using all available tools including compliance assistance, training, inspections, and enforcement.

Finally, as we have already noted, new and upgraded UST systems continue to have releases, although at a much reduced rate. There is also evidence releases are not being detected by the existing leak detection infrastructure as often as they should be. The Federal requirements set basic UST system performance standards, but allow a wide variety of approaches to meet those standards. While that provides significant flexibility to the tank owners, it also complicates efforts to operate, maintain, and inspect UST systems. If the equipment is insufficient or the operation and

maintenance of the equipment is not performed correctly, there will continue to be significant risk posed by releases from USTs. Our challenge is to determine the source and cause of the problems, and identify the appropriate remedies.

PROGRAM INITIATIVES TO ADDRESS THE CHALLENGES

In October 2000, EPA announced four initiatives to address the challenges facing the program: (1) Faster Cleanups, (2) USTfields for Abandoned Tanks, (3) Improving Compliance, and (4) Evaluating UST System Performance. In addition, the Agency has taken additional actions to deal with the challenges posed by MTBE. Before turning to the four initiatives, let's briefly examine some of the work that deals with MTBE.

EPA has undertaken several efforts to aid States in addressing problems with MTBE contamination. EPA has provided substantial funding and/or technical support to Santa Monica, South Lake Tahoe and Long Island to remediate MTBE. In addition, EPA is chairing a Federal-State workgroup that will create a multi-chapter interim guidance for States on MTBE related issues. Two years ago, EPA supported a grant to the New England Interstate Water Pollution Control Commission to develop a national baseline survey on the scope of the MTBE problem. EPA also maintains a website which documents MTBE remediation case studies so that experiences with MTBE remediation can be shared nationwide. EPA is also conducting a demonstration of treatment and remediation technologies for MTBE-contaminated soil, groundwater and drinking water at Port Hueneme, CA.

FASTER CLEANUPS

The goal of our first initiative, Faster Cleanups, is to increase the pace at which cleanups, including those with MTBE contamination, are initiated and completed, with an eye toward making land and water resources available for reuse. To accomplish this goal, EPA is finalizing a method for setting goals for completing cleanups more quickly. EPA has also recently created a web-based toolbox for promoting pay-for-performance contracting methods which in most cases shortened cleanup times and reduced cleanup costs by 30 to 50 percent. Finally, EPA plans to foster the development of voluntary multi-site cleanup agreements between State or Regional EPA programs and private, Federal, or tribal owners of multi-site leaking underground storage tanks. The economies of scale in developing multi-site agreements should help achieve faster cleanups.

USTFIELDS

Our second initiative, dealing with USTfields, is designed to address abandoned USTs. USTfields applies to abandoned or underused industrial and commercial properties where reuse is complicated by real or perceived environmental contamination from federally regulated USTs. Petroleum contamination is generally excluded from coverage under the Comprehensive Environmental Response, Compensation, and Liability Act and is not, therefore, covered under EPA's current brownfields program. EPA has undertaken the USTfields initiative to address petroleum contamination from abandoned tanks generally excluded from brownfields reuse. In November 2000, EPA announced its first 10 USTfield pilot grants. A recently released report, Recycling America's Gas Stations, captures the experiences from the first 10 pilots. These pilots are intended to help increase our knowledge of finding out how best to address abandoned and underused petroleum-impacted sites. EPA expects to announce an additional 40 USTfield grants later this spring.

In January 2002, President Bush signed the "Small Business Liability Relief and Brownfields Revitalization Act" into law. Under this legislation, substantially more funding is authorized to deal with abandoned petroleum contaminated sites that are not addressed under current programs. The President's budget requests $30 million to carry out this effort. This legislation will enable States, tribes, and communities throughout the country to assess, remediate, and ready for reuse a multitude of sites that otherwise would remain abandoned for many years. The USTfield pilots will provide invaluable lessons as we deal with many abandoned sites under the new legislation.

COMPLIANCE

Our third initiative focuses on improving compliance with the UST requirements. EPA and our State and tribal partners are constantly working to improve compliance. As part of this initiative, we are taking several specific steps. First, we have changed the way we are measuring compliance to focus on proper operation and maintenance. Previously, we focused primarily on whether the facility had the prop-

er equipment. As part of this initiative, we are improving the quality of compliance data so that EPA, States, and the public have an accurate and consistent measure of compliance. Second, we are looking at a variety of approaches, including third-party inspections and environmental results programs, such as the one in Massachusetts being used to improve compliance by dry cleaners, printers and photo finishers, to help improve compliance. Third, EPA is promoting multi-site compliance agreements between EPA and multi-site owners to bring their tanks into operational compliance. Finally, EPA is focusing additional attention on training needs, both for inspectors and for owners and operators. We are nearing completion of an evaluation of training needs. And we are working to increase training opportunities through a variety of institutions, including universities, and are exploring increased use of internet-based training.

UST SYSTEM PERFORMANCE

The fourth initiative, Evaluating UST System Performance, is an effort to determine the sources and causes of releases, as well as the reasons for the failure of release detection to detect releases, and to develop approaches to address these problems. To evaluate the performance of UST systems, EPA needed to gather and review quantitative and qualitative data currently available, and to initiate additional studies to gather additional quantitative data. EPA gathered and analyzed more than 50 existing reports or studies from States and industry and has met with or interviewed numerous State and industry experts. In order to obtain greater quantitative information about the types of systems failing and the reasons for those failures, EPA is partnering with 24 States to perform leak autopsies at new release sites to determine the source and cause of the release. EPA is also initiating studies with a number of States to evaluate specific UST system components and technologies and to compare the performance of various UST systems. EPA has learned much from these efforts about the sources and causes of problems, and there are clear trends emerging from these efforts.

EPA's evaluation of UST system performance has confirmed that new and upgraded UST systems still have releases and those releases are often not properly detected. We have identified faults with most components of UST systems, including the design, installation, operation, and maintenance of the various components. Many of the problems appears to be caused by human error or oversight—including failure to test and maintain corrosion protection and leak detection systems—but problems with the actual equipment is also of concern. Piping continues to be the leading cause for concern. Spills and overfills during product delivery also continue at an unacceptable rate and releases from dispensers have emerged as a major concern. Since most UST systems in operation are still single-walled, a failure of these UST systems will lead to a release directly into the environment. And when a release does occur, the existing release detection infrastructure is failing to adequately detect releases from tanks and pipes, and is, in fact, not even designed to detect most spills and overfills or dispenser releases. Also, the release detection infrastructure is by design reactive, only detecting releases after they enter the environment, unless a system is secondarily contained with interstitial monitoring. Finally, there is emerging evidence that vapor releases from new and upgraded UST systems are common, and released vapors—including MTBE—can find their way into the groundwater.

It is important to note that the current generation of UST systems is significantly more protective than the previous generation, but a number of problems remain. More work needs to be done to further understand the sources and causes of problems and to identify appropriate remedies. As part of this work, we will be collecting additional data. We will also increase our discussions with States and the regulated community to further examine these issues and to discuss potential solutions to the problems and challenges that still face us. This remains a significant priority for EPA.

In summary, Madam Chairman, we believe very substantial progress has been made on a variety of UST challenges including closing substandard USTs, improving compliance, and cleaning up releases. Nevertheless, the amount of work, especially in light of MTBE contamination, remaining to be accomplished is also substantial. We look forward to working with Congress, States, and our other partners to address the work before us.

S. 1850—UNDERGROUND STORAGE TANK COMPLIANCE ACT OF 2001

I would like to commend Senators Chafee, Carper, Smith, Jeffords and Inhofe for introducing S. 1850, the Underground Storage Tank Compliance Act of 2001, which would help prevent and cleanup releases from USTs. The Agency has been review-

ing the legislation and continues to analyze specific provisions. While we do not have an official Administration position on the bill, I have some thoughts I would like to share.

First of all, I appreciate the subcommittee's recognition of the importance of preventing and cleaning up UST releases. While tremendous progress has been made over the past decade there are still substantial challenges and risks posed by USTs, as I have outlined in this testimony. More specifically, the focus on remediating MTBE contamination is both timely and appropriate. As I have discussed, MTBE poses challenges to communities throughout the country. There are thousands of releases containing MTBE that still need to be addressed, and this will be a continuing challenge for EPA, its State and tribal partners, and the regulated community.

Preventing future releases is equally important and I also commend the subcommittee on its efforts to provide more tools and resources to make that happen. S. 1850's focus on inspection frequency and improving operator training is appropriate and could go a long way toward ensuring UST systems are properly managed to reduce the risk of releases.

Section 6 of S. 1850 has several important provisions. One of these provisions deals with delivery prohibition programs. Approximately 20 States have some form of delivery prohibition program. While these programs vary from State-to-State, many States have found these effective in promoting compliance with the UST requirements. This tool could be extremely valuable to those States that do not currently have delivery prohibition programs and to the Federal Government.

The legislation expands the eligible uses of LUST funding. This would give increased flexibility to both States and EPA to direct our resources to the most pressing needs. For example, we could use LUST funding for inspections and enforcement to ensure compliance with the preventive requirements. Since unique factors affect many States, the flexibility will prove particularly important to deal with State-specific issues.

The legislation also places increased emphasis on operator training. We believe this is extremely important to ensure proper operation and maintenance of UST systems. Some States, including California, are already taking steps to ensure proper operator training. Given the high turnover in facility personnel, ensuring proper training for all UST operators is particularly challenging. To meet this challenge will take considerable effort by the regulated community, States, and EPA.

While there are many provisions in S. 1850 that would strengthen the current UST program, there are provisions that need further clarification or could have the unintended effect of hindering UST program progress. We would be pleased to work with you and your staff to discuss these issues and concerns with the funding authorization levels in more detail.

I again commend the subcommittee for focusing on the challenges facing the UST program and for supporting efforts to protect our citizens from risks posed by leaking USTs. I look forward to working closely with the Environment and Public Works Committee and Congress as it continues deliberations on the bill.

STATEMENT OF JOHN STEPHENSON, DIRECTOR, NATURAL RESOURCES AND ENVIRONMENT

Madam Chairwoman and members of the subcommittee, I am pleased to have this opportunity to come before you today to discuss our May 2001 report on the Environmental Protection Agency's (EPA) Underground Storage Tank (UST) program.[1] The report relates directly to the topic of today's hearing—the proposed Underground Storage Tank Compliance Act of 2001 (S. 1850)—that is consistent with many of the suggested program improvements found in our report. The timing of the legislation and hearing is critical. Recent studies have shown that tanks that leak hazardous substances, such as methyl tertiary butyl ether (MTBE), contaminate the soil or water and continue to pose health risks ranging from nausea to kidney or liver damage or even cancer. Indeed, leaks of MTBE—a fuel additive for reducing emissions and raising octane—have been found in drinking water sources and several communities have now had to close their wells. For example, a school in Roselawn, IN, discovered that the children had been using and drinking water with 10 times EPA's recommended safe limit.

The Congress in 1984 created the UST program to protect the public from potential leaks from the then more than 2 million tanks located across the Nation, mostly

[1] Environmental Protection: Improved Inspections and Enforcement Would Better Ensure the Safety of Underground Storage Tanks (GAO–01–464, May 4, 2001).

at gas stations. Under the program, EPA required tank owners to install new leak detection equipment by the end of 1993 and new spill-, overfill-, and corrosion-prevention equipment by the end of 1998. If these conditions were not met, owners had to close or remove their tanks. In general, EPA has granted States the authority to implement the program with Agency oversight and monitoring, or States operate their own program under State law with limited EPA oversight. EPA has provided States funding (about $187,000 per State) for doing so. EPA retains authority for a small number of tanks primarily located on Indian lands. In addition, the Congress created a trust fund in 1986 to help EPA and the States cover tank cleanup costs that owners and operators could not afford or were reluctant to pay. The fund is replenished partly through a $.001/gallon tax on gasoline and other fuels. At the end of fiscal year 2001, the fund had a balance of about $1.7 billion.

Because the States are primarily implementing the provisions of the program, in October 2000, we conducted a survey of all 50 States and the District of Columbia to determine whether tanks are complying with program requirements, how EPA and the States are inspecting tanks and enforcing the requirements, and whether upgraded tanks still leak. We also visited the three EPA regions with the largest number of tanks to monitor. In summary, we found that:

• About 1.5 million tanks had been permanently closed since the program was created, leaving about 693,000 tanks subject to UST requirements. Based on the States' responses to our survey, we estimated that about 89 percent of these tanks had the required protective equipment installed, but that almost 30 percent of them—more than 200,000 tanks—were not being operated and maintained properly, thus, increasing the chance of leaks. For example, 19 States reported frequent problems with corrosion—prevention equipment and 15 States reported that leak detection equipment was frequently turned off or improperly maintained. The States and EPA attributed these operation and maintenance problems primarily to poorly trained staff. Of the remaining 11 percent, or 76,000, tanks that we estimated had not been retrofitted with the required equipment, EPA and the States speculated that the tanks were probably inactive and empty. Nevertheless, it is important to address them because experience has shown that they may have leaked in the past, but the contamination, which poses health risks, is not discovered until the tank is dug up for removal. However, most States and EPA do not know if all inactive tanks are empty—and we could not verify the accuracy and completeness of the compliance data they reported—because they do not physically inspect all tanks.

• In fact, over half of the States do not inspect all of their tanks frequently enough to meet the minimum rate recommended by EPA—at least once every 3 years. In addition, 27 States lack the authority to prohibit fuel deliveries to stations with problem tanks—one of the most effective tools for ensuring compliance with program requirements—relying instead on issuing citations and fines. States said that they did not have the money, staff, or, authority to conduct more inspections or more strongly enforce tank compliance.

• Finally, States reported that even tanks with the required leak prevention and detection equipment installed continue to leak, although the full extent of the problem is not known. In response to our survey, 14 States reported some tank leaks, 17 States said their tanks seldom or never leaked, and 20 States did not know if leaks occurred before the tanks were upgraded. EPA and some localities have studies underway to obtain better data on leaks from upgraded tanks. EPA, as part of a set of four program initiatives it announced in October 2000, is also considering whether it needs to set new tank requirements, such as double-walled tanks, to prevent further leaks.

To address these problems, our report recommends that EPA work with the States to determine training needs and ways to fill them, and to more specifically address the estimated 76,000 tanks that have not yet been upgraded, closed, or removed as required. Our report also contains recommendations to EPA and suggestions to the Congress on ways to promote better inspections and enforcement and to address related resource shortfalls by expanding the use of the $1.7 billion trust fund designated for tank cleanup to also cover additional inspection and enforcement activities. The proposed legislation is consistent with many of the program improvements that we suggested.

MOST TANKS HAVE BEEN UPGRADED, BUT MANY ARE NOT PROPERLY OPERATED AND MAINTAINED

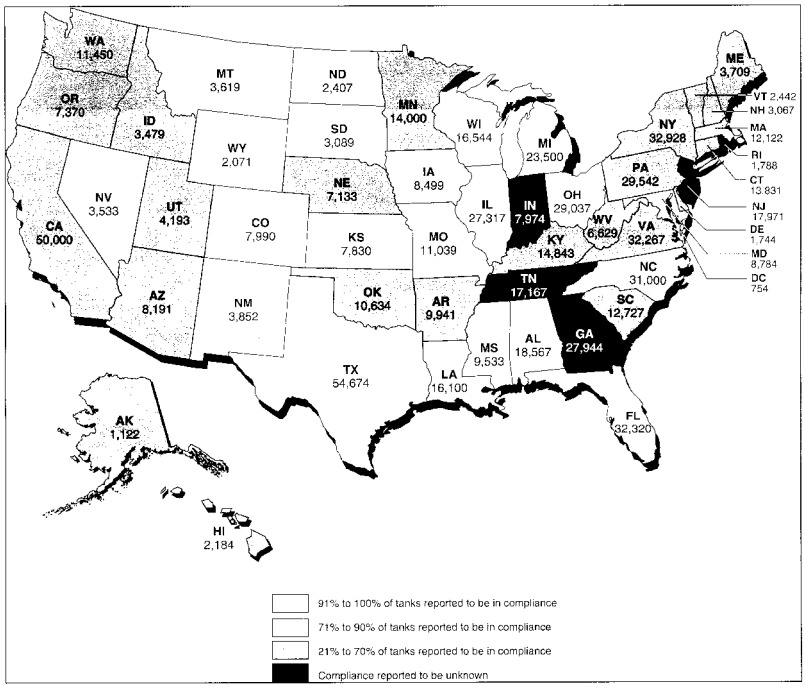
Based on State responses to our survey, we estimated that nearly 617,000, or about 89 percent of the approximately 693,000 regulated tanks, had been upgraded with the federally required equipment by the end of fiscal year 2000. EPA data

showed that about 70 percent of the total number of tanks that its regions regulate on tribal lands had also been upgraded.

With regard to the approximately 76,000 tanks that we estimated have not been upgraded, closed, or removed as required, 17 States and the 3 EPA regions we visited reported that they believed that most of these tanks were either empty or inactive. However, another five States reported that at least half of their non-upgraded tanks were still in use. EPA and States assume that the tanks are empty or inactive and therefore pose less risk. As a result, they may give them a lower priority for resources. However, States also reported that they generally did not discover tank leaks or contamination around tanks until the empty or inactive tanks were removed from the ground during replacement or closure. Consequently, unless EPA and the States address these non-compliant tanks in a more timely manner, they may be overlooking a potential source of soil and groundwater contamination.

Even though most tanks have been upgraded, we estimated from our survey data that more than 200,000 of them, or about 29 percent, were not being properly operated and maintained, increasing the risk of leaks. The extent of operations and maintenance problems varied across the States, as figure 1 illustrates.

Figure 1: Compliance With Federal Operations and Maintenance Requirements Varies (total active tanks per state)



Source: GAO's estimates based on responses to a survey of tank program managers in all 50 states and the District of Columbia.

Note: EPA implements the federal tank program in Idaho and enforces certain requirements in New York because these states lack some or all of the necessary laws.

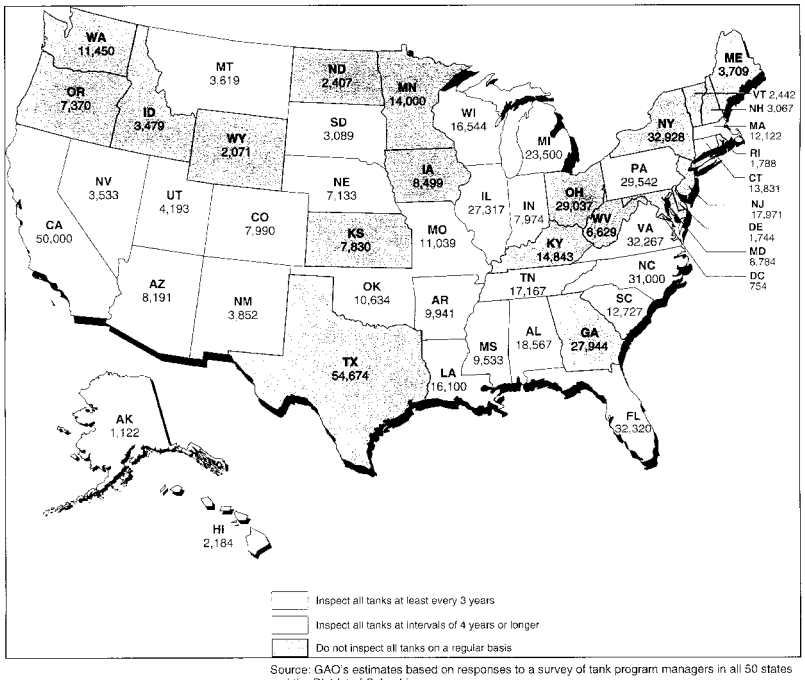
The States reported a variety of operational and maintenance problems, such as operators turning off leak detection equipment. The States also reported that the majority of problems occurred at tanks owned by small, independent businesses; non-retail and commercial companies, such as cab companies; and local governments. The States attributed these problems to a lack of training for tank owners, installers, operators, removers, and inspectors. These smaller businesses and local government operations may find it more difficult to afford adequate training, especially given the high turnover rates among tank staff, or may give training a lower priority. Almost all of the States reported a need for additional resources to keep their own inspectors and program staff trained, and 41 States requested additional technical assistance from the Federal Government to provide such training.

To date, EPA has provided States with a number of training sessions and helpful tools, such as operation and maintenance checklists and guidelines. One of EPA's tank program initiatives is also intended to improve training and tank compliance with Federal requirements, such as setting annual compliance targets with the States. The Agency is in the process of implementing its compliance improvement initiative, which involves actions such as setting the targets and providing incentives to tank owners, but it is too early to gauge the impact of the Agency's efforts on compliance rates.

MOST STATES DO NOT MEET EPA'S RECOMMENDATION TO INSPECT ALL TANKS EVERY 3 YEARS OR HAVE THE ENFORCEMENT TOOLS NEEDED TO IDENTIFY AND CORRECT PROBLEMS

According to EPA's program managers, only physical inspections can confirm whether tanks have been upgraded and are being properly operated and maintained. However, only 19 States physically inspect all of their tanks at least once every 3 years—the minimum that EPA considers necessary for effective tank monitoring. Another 10 States inspect all tanks, but less frequently. The remaining 22 States do not inspect all tanks, but instead generally target inspections to potentially problematic tanks, such as those close to drinking water sources. In addition, not all of EPA's own regions comply with the recommended rate. Two of the three regions that we visited inspected tanks located on tribal land every 3 years. Figure 2 illustrates the States' reported inspection practices.

Figure 2: Frequency of Inspections Varies Among States (total active tanks per state)



Source: GAO's estimates based on responses to a survey of tank program managers in all 50 states and the District of Columbia.

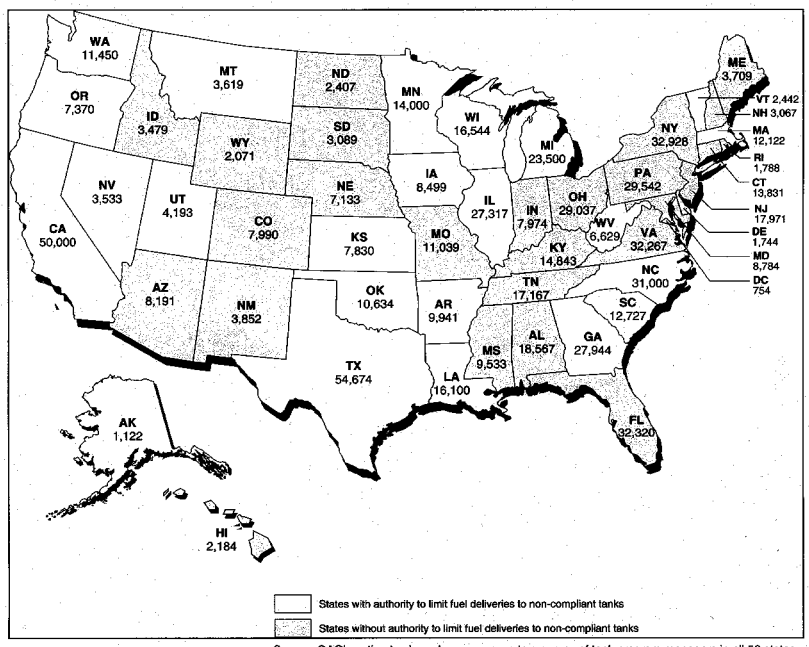
Note: EPA implements the federal tank program in Idaho and enforces certain requirements in New York because these states lack some or all of the necessary laws.

According to our survey results, some States and EPA regions would need additional staff to conduct more frequent inspections. For example, under staffing levels at the time of our review, the inspectors in 11 States would each have to visit more than 300 facilities a year to cover all tanks at least once every 3 years, but EPA estimates that a qualified inspector can only visit at most 200 facilities a year. Moreover, because most States use their own employees to conduct inspections, State legislatures would need to provide them additional hiring authority and funding to acquire more inspectors. Officials in 40 States said that they would support

a Federal mandate requiring States to periodically inspect all tanks, in part because they expect that such a mandate would provide them needed leverage to obtain the requisite inspection staff and funding from their State legislatures.

In addition to more frequent inspections, a number of States stated that they need additional enforcement tools to correct problem tanks. EPA's program managers stated that good enforcement requires a variety of tools, including the ability to issue citations or fines. One of the most effective tools is the ability to prohibit suppliers from delivering fuel to stations with problem tanks. However, as figure 3 illustrates, 27 States reported that they did not have the authority to stop deliveries. In addition, EPA believes, and we agree, that the law governing the tank program does not give the Agency clear authority to regulate fuel suppliers and therefore prohibit their deliveries.

Figure 3: Many States Lack Authority to Prohibit Fuel Deliveries to Problem Tanks (total active tanks per state)



Source: GAO's estimates based on responses to a survey of tank program managers in all 50 states and the District of Columbia.

Note: EPA implements the federal tank program in Idaho and enforces certain requirements in New York because these states lack some or all of the necessary laws.

Almost all of the States said they need additional enforcement resources and 27 need additional authority. Members of both an expert panel and an industry group, which EPA convened to help it assess the tank program, likewise saw the need for States to have more resources and more uniform and consistent enforcement across States, including the authority to prohibit fuel deliveries. They further noted that the fear of being shut down would provide owners and operators a greater incentive to comply with Federal requirements.

Under its tank initiatives, EPA is working with States to implement third party inspection programs, using either private contractors or other State agencies that may also be inspecting these business sites for other reasons. EPA's regions have the opportunity, to some extent, to use the grants that they provide to the States for their tank programs as a means to encourage more inspections and better enforcement. However, the Agency does not want to limit State funding to the point where this further jeopardizes program implementation. The Congress may also wish to consider making more funds available to States to improve tank inspections and enforcement. For example, the Congress could increase the amount of funds it provides from the Leaking Underground Storage Tank trust fund, which the Congress established to specifically provide funds for cleaning up contamination from tanks. The Congress could then allow States to spend a portion of these funds on

inspections and enforcement. It has considered taking this action in the past, and 40 States said that they would welcome such funding flexibility.

SOME TANKS CONTINUE TO LEAK EVEN AFTER THEY HAVE BEEN UPGRADED, ALTHOUGH THE EXTENT OF THIS PROBLEM IS UNKNOWN

In fiscal year 2000, EPA and the States confirmed a total of more than 14,500 leaks or releases from regulated tanks, although the Agency and many of the States could not verify whether the releases had occurred before or after the tanks had been upgraded. According to our survey, 14 States said that they had traced newly discovered leaks or releases that year to upgraded tanks, while another 17 States said they seldom or never detected such leaks. The remaining 20 States could not confirm whether or not their upgraded tanks leaked.

EPA recognizes the need to collect better data to determine the extent and cause of leaks from upgraded tanks, the effectiveness of the current equipment, and if there is a need to strengthen existing equipment standards. The Agency has launched studies in several of its regions to obtain such data, but it may have trouble concluding whether leaks occurred after the upgrades. In a study of local tanks, researchers in Santa Clara County, CA, concluded that upgraded tanks do not provide complete protection against leaks, and even properly operated and maintained tank monitoring systems cannot guarantee that leaks are detected. EPA, as one of its program initiatives, is working with the States to gather data on leaks from upgraded tanks in order to determine whether equipment requirements need to be strengthened, such as requiring double-walled tanks. The States and the industry and expert groups support EPA's actions.

In closing, the States and EPA cannot ensure that all regulated tanks have the required equipment to prevent health risks from fuel leaks, spills, and overfills or that tanks are safely operated and maintained. Many States are not inspecting all of their tanks to make sure that they do not leak, nor can they prohibit fuel from being delivered to problem tanks. EPA has the opportunity to help its regions and States correct these limitations through its tank initiatives, but it is difficult to determine whether the Agency's proposed actions will be sufficient because it is just defining its implementation plans. The Congress also has the opportunity to help provide EPA and the States the additional inspection and enforcement authority and resources they need to improve tank compliance and safety.

Therefore, to better ensure that underground storage tanks meet Federal requirements to prevent contamination that poses health risks, we have made a number of recommendations to the EPA administrator, including that the Agency:

1. Work with the States to address the remaining non-upgraded tanks, such as reviewing available information to determine those that pose the greatest risks and setting up timetables to remove or close these tanks.

2. Supplement the training support it has provided to date by having each region work with each of the States in its jurisdiction to determine specific training needs and tailored ways to meet them.

In addition, we suggested several actions that the Congress may want to consider to help the program, which have been incorporated in the proposed legislation. Such actions include efforts to determine whether to increase the program's resources, for example, by increasing the amount of funds it appropriates from the trust fund and allowing States to spend a limited portion on training, inspection, and enforcement activities, as long as cleanups are not delayed. In addition, we suggested that the Congress consider (1) authorizing EPA to require physical inspections of all tanks on a periodic basis, (2) authorizing EPA to prohibit fuel deliveries to tanks that do not comply with Federal requirements, and (3) requiring that States have similar authority to prohibit fuel deliveries.

STATEMENT OF CRAIG PERKINS, DIRECTOR OF ENVIRONMENT AND CITY OF SANTA MONICA, CA

On behalf of the Mayor and City Council of the city of Santa Monica, I want to thank you for the opportunity to give testimony on S. 1850. First, I would like to share with you today the key lessons we have learned from our painful experiences with underground storage tanks and MTBE in Santa Monica. Santa Monica is a city of nearly 90,000 permanent residents and over 200,000 daily visitors. The city depends heavily on groundwater for its drinking water supply. After many years of effort, by 1995 we had been able to maximize the use of local groundwater supplies and achieve 70 percent water self-sufficiency. By using our sustainable local water resources we were able to reduce our reliance on increasingly scarce water imported from northern California and the Colorado River. This all changed in 1996 when

Santa Monica was hit with a drinking water catastrophe caused by MTBE. Within a 6-month period in 1996 MTBE forced Santa Monica to shut down most of its water wells. These wells accounted for one-half of the total daily water supply in Santa Monica and we must now import more than 80 percent of our drinking water, putting further strain on California's already fragile water supply system. The effects of MTBE can be devastating:

• Once released from a tank or pipeline, MTBE travels quickly and readily dissolves in water unlike the other chemicals in gasoline;

• MTBE has an uncanny ability to find its way into drinking water wells. Although gasoline has been around for decades, it is only the relatively recent addition of MTBE that has caused widespread water contamination in Santa Monica and elsewhere;

• MTBE attacks swiftly. Once discovered, MTBE levels in the city's wells rose more quickly than any other water contaminant we had ever encountered; and

• MTBE strikes at the heart of public confidence in the safety of drinking water supplies. People will not drink water that smells and tastes like turpentine, nor should they be expected to.

S. 1850 is a step in the right direction toward stricter oversight of underground storage tanks and freeing up of additional financial resources to facilitate inspection, enforcement and corrective actions. However, based on our "real world" experience in Santa Monica we believe that S. 1850 should go much farther in some keys areas.

First, the allocation of $200 million for corrective actions related to MTBE releases is far less than what will be needed to clean up the MTBE mess nationwide. The projected cost to just cleanup Santa Monica's main well field is over $200 million. Current estimates for the total cost of nationwide MTBE clean-up are around $30 billion. Clearly, the costs for remediation of MTBE and other water contamination must ultimately be raid for by the polluter. But, unfortunately, those companies responsible for ceasing the MTBE pollution in Santa Monica and many other communities have not yet stepped forward to do what's right. Until they do, significant financial assistance will be required to start the clean-up process.

Second, let's make sure we are doing everything that we can to keep that underground storage tanks from leaking in the first place. Even the newest underground storage tanks leak, and the leaks are often not in the tank itself but in the piping that connects the tank to the fuel dispensing systems. A primary focus in S. 1850 needs to be placed on inspection, training and enforcement. Too often in the past, operators of underground fuel tanks have been able to act irresponsibly because the threat of enforcement was remote or even nonexistent. Let's make sure that the tools and resources are in place so that non-compliant tanks are taken out of service and the public and environment are better protected.

Finally, nothing in S. 1850 should preclude any State or local government from seeking legal redress, taking legal action or adopting regulations and standards of performance with respect to underground storage tanks that are more stringent than Federal law, and S. 1850 should ensure that all underground storage tank installations at Federal facilities are subject to the same requirements as everyone else. S. 1850 should provide a floor, but should not hamper State or local governments in their efforts to either protect human health and the environment or pursue polluters.

If S. 1850 incorporates the stronger provisions suggested above, it can become a very significant toot to not only begin the cleanup of existing MTBE groundwater contamination but to prevent future storage tank leaks as well.

The two irrefutable facts that have emerged from Santa Monica's odyssey as the "poster child" for MTBE water contamination are: (1) underground storage tanks leak; and (2) it is extremely difficult to get polluters to pay for the cleanup of their pollution. Please strengthen S. 1850 so that we will all have a better chance of not repeating the mistakes of the past. We need to create better options, which is what S. 1850 is about. Thank you for the privilege of testifying before your subcommittee today.

STATEMENT OF GRANT COPE, ON BEHALF OF U.S. PUBLIC INTEREST RESEARCH GROUP

I. SUMMARY

I would like to thank Senator Boxer for holding a hearing on the S. 1850, and examining the issues related to improving the Leaking Underground Storage Tank program ("UST"). We would also like to thank the Senator for allowing us to submit testimony on this issue. Leaking underground storage tanks present a serious threat to public health and environmental quality. The current Federal program, which

most States implement through their own programs, is not inadequately addressing threats posed by underground storage tanks. Federal legislation is needed to strengthen Federal and State enforcement authorities, increase the frequency of inspections, expand pollution prevention efforts, waive sovereign immunity at Federal facilities, and augment existing resources to ensure that Federal and State UST programs protect public health and the environment. U.S. PIRG opposes any legislation that weakens existing protections, including EPA's authority to order the cleanup of contamination.

II. LEAKING UNDERGROUND STORAGE TANKS PRESENT A SIGNIFICANT THREAT TO PUBLIC HEALTH

Groundwater is a fundamental resource for human life and economic vitality in our Nation. Fifty percent of the people in the United States use groundwater for drinking water, including virtually 100 percent of people in many rural areas.[1] In 29 States, over 50 percent of the population rely on groundwater for drinking water.[2]

Leaking underground storage tanks present significant risks to groundwater quality, and therefore to human health, environmental quality, and economic growth. To address the risks posed by leaking underground storage tanks, Congress amended the Resources Conservation and Recovery Act in 1982 to create a program that would cleanup contamination related to underground storage tanks, and prevent future contamination. Despite Congress's creation of the UST program, leaking underground storage tanks continue to present serious threats to public health and the environment.

As of February 28, 1999, there were about 390,000 releases from regulated underground storage tanks.[3] These releases present serious threats to public health and environmental quality. Many State and Federal agencies rank leaking underground storage tanks as the most prominent source of groundwater contamination. For example, 37 States listed leaking underground storage tanks the No. 1 "major source of groundwater contamination."[4] EPA found that leaking underground storage tanks are one of the sources most frequently cited as being of greatest concern as a potential source of groundwater contamination.[5]

Gasoline leaking from underground storage tanks is one of the most common sources of groundwater contamination.[6] Gasoline contains more than 150 chemicals, including benzene, toluene, and automotive gasolineylene.[7] Benzene is a recognized carcinogen, and reproductive and developmental toxicant.[8] Toluene is a recognized developmental toxicant, and is suspected of also adversely impacting the cardiovascular, immune, respiratory, and reproductive systems.[9] These chemicals, and many other held in underground storage tanks threaten public health.

A. Many States That Depend On Groundwater For Drinking Water Have A High Number Of Leaking Tanks

EPA has ranked states based on the number of confirmed releases from underground storage tanks.[10] EPA ranked States in three tiers: (1) Tier One included States with 10,001 to 34,000 confirmed releases; (2) Tier Two included States with 5,001 and 10,000 confirmed releases; and (3) Tier Three included State with 0 to 5,000 confirmed releases. As will be discussed later, these numbers could be an underestimate due to inadequate inspections.

Fifty-six percent of the States have over 5,001 confirmed releases. There are 12 States ranked as "Tier One", in nine of these States, over 40 percent of the population get drinking water from groundwater. Eighty-two percent of States ranked as Tier One or Two (23 of 28 States) use groundwater as a source of drinking water for over 40 percent of their population. This data paints a very troubling picture,

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[1] EPA, *Safe Drinking Water Act, Section 1429 Groundwater Report To Congress*, EPA–816–99–016, ii (1999).
[2] *Id*, at 4.
[3] *Id*, at 16.
[4] EPA, *National Water Quality Inventory, 1998 Report To Congress*, EPA 816-R–00–013, 8 (2000).
[5] *Supra*, Note 3.
[6] *Id.*
[7] Agency for Toxic Substances and Disease Registry, *ToxFaqs Fact Sheet on Automotive Gasoline*, 1 (1996).
[8] Scorecard, downloaded on May 6 at http://www.scorecard.org/chemical-profiles/.
[9] Scorecard, downloaded on May 6 at http://www.scorecard.org/chemical-profiles/.
[10] EPA, *Safe Drinking Water Act, Section 1429 Groundwater Report To Congress*, EPA–816–99–016, 16 (1999).

and highlights the need for increasing protections against existing and potential sources of contamination from underground storage tanks.

III. STATES ARE FAILING TO COMPLY WITH REQUIREMENTS TO PROTECT PUBLIC HEALTH AND THE ENVIRONMENT

In May 2001, the General Accounting Office published a report to Congress examining State and Federal Underground Storage Tank programs.[11] GAO concluded that these programs were in need of reforms to ensure that underground storage tanks were adequately regulated to protect public health and environmental quality.

A. GAO Conclusions

GAO reached nine specific conclusions. In general, these conclusions demonstrate that Underground Storage Tank programs are of widely varying quality, with many inadequately protecting public health and environmental quality. GAO's conclusions demonstrate a serious need to significantly increase EPA's ability to enforce Federal requirements for tanks, and to take other steps to increase the thoroughness and frequency of inspections.

States Ranked By Confirmed Releases From Underground Storage Tanks

Rank	State	Confirmed Releases*	Percent Pop. use GW	Rank	State	Confirmed Releases*	Percent Pop. Use GW
1	FL	1	92.8	26	GA	2	41.4
2	WI	1	69.8	27	VA	2	34.1
3	NC	1	49.8	28	KY	2	25.1
4	TN	1	47	29	HI	3	96.5
5	OH	1	46.3	30	ID	3	96.2
6	MI	1	46	31	NM	3	89.9
7	CA	1	45.5	32	SD	3	69.8
8	TX	1	45.4	33	DE	3	66.1
9	PA	1	41.2	34	VT	3	65
10	NY	1	34.6	35	NH	3	61.7
11	IL	1	33.2	36	LA	3	60.9
12	MD	1	30.8	37	AK	3	60.8
13	MS	2	92.1	38	ME	3	60.4
14	NE	2	87.1	39	WY	3	58.5
15	MN	2	79.8	40	UT	3	57
16	IA	2	78.1	41	ND	3	56.9
17	IN	2	63.6	42	CT	3	54.1
18	WA	2	60.8	43	MT	3	53.4
19	AZ	2	60.2	44	AR	3	53.1
20	MO	2	53.8	45	KS	3	50.4
21	NJ	2	53.2	46	WV	3	43.3
22	AL	2	51.9	47	OK	3	33.9
23	MA	2	45.7	48	NV	3	30.8
24	SC	2	44.9	49	RI	3	26.5
25	OR	2	43.6	50	CO	3	22.1

*Rank based on the following range of releases: 1=10,000 to 34,000; 2=5,001 to 10,000; and 3=0 to 5,000
Please Note: Confirmed releases could be an underestimate due to lack of accurate inspections.

GAO's specific conclusion included the following:

(1) About 30 percent of the regulated tanks (over 200,000) "were not being operated or maintained properly, increasing the risk of soil and groundwater contamination."[12]

(2) Operation and maintenance problems were largely a result every person who comes into contact with the tank, including tank owners, installers, operators and removers, being poorly trained.[13]

(3) EPA and State compliance data for tanks is unreliable because States and several EPA regions do not physically inspect all tanks for compliance, but rather, merely estimate compliance rates based on inspections of selected tanks or owners' self-certifications.[14]

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[11] General Accounting Office, *Improved Inspections and Enforcement Would Better Ensure the Safety of Underground Storage Tanks* (2001).
[12] *Id*, at 2.
[13] *Id*, at 2.
[14] *Id*, at 3.

(4) An estimated 76,000 empty or inactive tanks may still pose threats to human health and environmental quality and therefore should be inspected and removed when merited.[15]

(5) Five States reported that at least half of their non-upgraded tanks are still in use.[16]

(6) Fourteen States reported some upgraded tanks still leaked, and twenty did not know whether their tanks leaked.[17]

(7) A California study found that tanks with upgraded equipment do not provide complete protections against leaks, and that monitoring systems cannot guarantee to detect leaks.[18]

(8) Twenty-seven States and EPA lacked the authority to use the most effective enforcement tool to ensure compliance with protections: prohibiting fuel deliveries to non-compliant tanks.[19]

(9) Forty-seven States needed additional resources to adequately enforce the protections.[20]

B. GAO Recommendations to EPA

GAO made four specific recommendations to correct some of the deficiencies noted in their report. First, GAO recommended that EPA work with States to determine which empty or inactive tanks pose the greatest potential health and environmental risks.[21] This should include setting up timetables for owners, States or EPA to remove or close these tanks in compliance with Federal requirements and taking enforcement action against entities that continue to operate tanks without required equipment.[22] Second, GAO recommended that EPA increase their training and support capacities for States.[23] Third, GAO recommended that EPA negotiate with States to determine a minimum frequency for physical inspection of all tanks.[24] Fourth, GAO recommended that EPA tell Congress how much additional resources are needed to ensure tanks comply with Federal requirements.[25]

C. GAO Recommendations to Congress

GAO also made two broad recommendations to Congress. First, GAO recommended that Congress want to consider increasing resources to the program.[26] Second, GAO recommended that Congress may want to authorize Federal requirements for physical inspection of tanks on a regular basis; prohibitions on the delivery of fuel to tanks that are out of compliance with Federal requirements; and States to prohibit fuel deliveries under similar circumstances.[27]

IV. S. 1850 SHOULD BETTER ADDRESS THREATS TO PUBLIC HEALTH FROM LEAKING TANKS

U.S. PIRG has reviewed S. 1850, the "Underground Storage Tank Compliance Act of 2001." U.S. PIRG agrees with the need to increase compliance with protections for public health and environmental quality related to underground storage tanks. However, we believe that S. 1850 should be substantially strengthen in 15 ways, consistent with the GAO's finding and good public policy respecting public health and environmental quality. Further, in several key respects, S. 1850 could weaken protections. Therefore, as elaborate below, U.S. PIRG suggests the following modifications to S. 1850.

A. Owners and Operators Should Be Liable For All Corrective Action Costs

U.S. PIRG supports the polluter pays principle, which holds that polluters should pay to clean up their contamination. S. 1850 could relieve owners and operators of underground storage tanks of their responsibility to compensate the government for money expended to clean up contamination from tanks.[28] Therefore, U.S. PIRG opposes this provision of S. 1850.

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[15] *Id.*
[16] *Id*, at 8.
[17] *Id*, at 4.
[18] *Id.*
[19] *Id.*
[20] *Id*, at 10.
[21] *Id*, at 18.
[22] *Id*, at 19.
[23] *Id.*
[24] *Id.*
[25] *Id.*
[26] *Id.*
[27] *Id.*
[28] S. 1850, p. 3 lines 6–10.

U.S. PIRG urges Congress to ensure that owners and operators are held liable for the full cleanup costs incurred by government agencies. If owners and operators could not pay off the entire amount, then they should be allowed to pay off these costs little by little. To accomplish this goal, this current section should be modified to allow EPA and States to work out payment plans with owners and operators that can demonstrate that they cannot pay the full costs of cleanup activities.

B. Congress Should Encourage States To Fund Their Programs Using The Polluter Pays Principle

U.S. PIRG urges Congress to encourage States to create programs that shift program costs to entities that use regulated underground storage tanks. We suggest that Congress incorporate this incentive by setting aside a percentage of the funds that can be distributed only to States that have shifted costs onto such entities. This would conserve trust fund resources and place the costs of State programs on State entities that are being regulated.

C. Congress Should Require State and Local To Enforce Requirements That Provide Equal Or Greater Protection As Federal Requirements

U.S. PIRG urges Congress to ensure that State and local entities implement and enforce requirements that provide an equal or greater level of protection as Federal requirements.[29] Leaking underground storage tanks represent a serious threat to public health and environmental quality. This addition would help ensure that State and local enforcement officials work to implement and enforce strong protections against contamination from these tanks.

D. EPA Should Not Have To Discuss Reallocation With Tank Owners and Operators

U.S. PIRG does not believe that EPA should have to consult with tank owners and operators prior revising the reallocating process.[30] The decision to reallocate funds should be based on protecting public health and environmental quality. EPA could reasonably consult with States that have knowledge about program needs related to this issue. However, owners and operators of tanks could have more parochial interests. Therefore, EPA should not be required to consult with these entities.

E. U.S. PIRG Opposes S. 1850's Prohibition On Cost Recovery

U.S. PIRG supports the polluter pays principle, which holds that polluters should pay to clean up their contamination. Consequently, U.S. PIRG opposes S. 1850's prohibition on cost recovery.[31] Congress should encourage—not prohibit—EPA from undertaking cost recovery actions against owners and operators for cleanup activities related to contamination from leaking underground storage tanks.

F. Congress Should Strengthen S. 1850's Inspection Requirements

U.S. PIRG urges Congress to strengthen S. 1850's inspection requirements in two key ways. First, Congress should require physical inspections. Second, Congress should disallow self-certification, due to the potential of conflicts of interests noted by GAO. These requirements would put a premium on preventing contamination, which will conserve limited public resources and prevent potential threats to public health and the environment.

G. Congress Should Require Community Involvement In Operator Training Procedures

U.S. PIRG urges Congress to incorporate community members into the decision-making process related to operator trainings.[32] Many community groups have technical and practical experience with appropriate activities related to operating and maintaining underground storage tanks. Congress should require Federal and State agencies to utilize this knowledge where it is available.

H. Congress Should Require State Guidelines To Consider The Importance Of State Groundwater Resource

U.S. PIRG urges Congress to require States to consider the potential risks posed by leaking underground storage tanks to groundwater quality and quantity, and the potential future importance of groundwater for the State in developing guidelines and strategies for training operators.[33] This could help to increase the preventative nature of training. U.S. PIRG suggests that Congress add the following language

[29] S. 1850, p. 3, lines 11–18.
[30] S. 1850, p. 5, lines 12–13.
[31] S. 1850, p. 7, lines 1–6.
[32] S. 1850, p. 8, lines 3–10, and p. 9, lines 7–14.
[33] S. 1850, p. 8, lines 2–25, and p. 9, lines 7–14.

to S. 1850 in the relevant sections, "The importance of high quality groundwater and the need to emphasize preventing contamination."

I. Congress Should Not Limit EPA's Authority To Issue Administrative Orders

U.S. PIRG opposes the constraints on EPA's authority to issue orders to clean up contamination contained in S. 1850.[34] Congress should not restrict in any way EPA's authority to protect public health and environmental quality. However, the language contained in S. 1850 could be interpreted in this fashion. Therefore, Congress should clarify its intent that EPA should not be restricted in any way from issuing cleanup orders when there may be a threat to public health or environmental quality.

Conversely, Congress should encourage EPA and the States to heavily fine repeat violators of protections for public health and the environment. Therefore, U.S. PIRG agrees that Congress should direct EPA to consider whether owners and operators of tanks and transporters of fuel have repeatedly violated such protections. U.S. PIRG also urges Congress to clarify that EPA should consider such past actions, or activities that are inconsistent with established training programs, as a rationale to increase the gravity of fines. Of course, at a minimum, EPA should collect any economic gain resulting from the violation and assess a penalty adequate to ensure the entity will not again violate any requirements.

J. Congress Should Make Authority To Prohibit Fuel Shipments, Operator Training Requirements, and Inspection Provisions Self-Effecting

U.S. PIRG urges Congress to make critical enforcement tools and preventative measures self-effecting, so that this is no ambiguity or delay in their use. In particular, Congress should clarify that EPA and State authorities can prohibit fuel shipments to tanks that are out of compliance upon S. 1850 date of enactment.[35] Similarly, Congress should state that S. 1850's operator training requirements[36] and inspection provisions[37] are also unambiguously enforceable. This would ensure that EPA and States could protect public health and environmental quality despite any delay in promulgating regulations.

K. Congress Should Require More Specific Data

U.S. PIRG supports S. 1850's requirement for a database on issues related to underground storage tanks. However, we urge the Congress to incorporate requirements that State collect and also make publicly available information on the owners and operators of all underground storage tanks. Providing the public with information about polluters is a proven, low-cost method to increase compliance and decrease pollution. S. 1850 should incorporate the principle of right-to-know by requiring the collection and dissemination of such information.

L. EPA Should Develop Uniform Guidelines For State Data Bases

U.S. PIRG supports S. 1850's requirement that States make information related to underground storage tanks available to the public electronically.[38] U.S. PIRG urges Congress to require EPA to develop software that states use to supply such information. This would make State databases readily comparable, which could aid enforcement efforts and facilitate the public's right-to-know about potential sources of contamination in their communities.

M. Congress Should Unambiguously Waive Federal Sovereign Immunity

U.S. PIRG urges Congress to unambiguously waive sovereign immunity for Federal agencies that own or operate underground storage tanks.[39] Federal facilities should not be above the law. If their actions threaten public health and environmental quality, then EPA and States should be able to fine these agencies. Courts are loath to find such waivers absent an unambiguous statement from Congress. Therefore, Congress should amend S. 1850 to incorporate an unambiguous waiver of sovereign immunity.

N. Congress Should Increase The Authorization Of Appropriations

U.S. PIRG supports an increase in the authorization of appropriations for the leaking underground storage tank program. GAO recommended that Congress consider increasing resources to the program. However, S. 1850 currently proposes de-

[34] S. 1850, p. 12, lines 23–24, and p. 13, lines 1–14.
[35] S. 1850, p. 13, lines 21–14, and p. 14, lines 1–20.
[36] S. 1850, p. 8, lines 1–24, and p. 9, lines 1–20.
[37] S. 1850, p. 7, lines 7–21.
[38] S. 1850, p. 16, lines 17–4.
[39] S. 1850, p. 16, lines 5–23.

clining authorizations.[40] This is contrary to GAO's recommendations and sends the wrong signal regarding the need to address severe deficiencies in a regulatory program charged with protecting public health, environmental quality, and economic growth from a significant threat. Therefore, U.S. PIRG recommends that Congress direct EPA to spend unused funds currently in the trust fund and then increases authorized appropriations consistent with program needs.

O. Congress Should Direct Federal Entities And States To Comprehensively Assess The Adequacy Of Financial Responsibility Mechanisms

U.S. PIRG urges Congress to require a comprehensive review of the adequacies of financial responsibility mechanisms. There is data demonstrating that facilities that have a requirement to maintain similar financial responsibility requirements under other programs may not be adequately complying with such requirements, and that such requirements may be inadequate to protect public health.[41] Given the threats posed by leaking underground storage tanks, U.S. PIRG believes that Congress should study and problems and direct appropriate steps to taken to ensure tank owners and operators can cover the cleanup costs associated with leaking underground storage tanks.

V. CONCLUSION: CONGRESS SHOULD INCREASE—NOW WEAKEN—PROTECTIONS AT LEAKING UNDERGROUND STORAGE TANKS

Leaking underground storage tanks are a serious threat to public health and environmental quality demanding immediate congressional attention. Congress should act to increase, not weaken, protections. As discussed above, S. 1850 contains provisions that would weaken protections. U.S. PIRG opposes any such weakening of protections for public health. U.S. PIRG believes that if Congress incorporates the suggestions outlined above and then enacts the legislation, Congress will have taken a significant step toward addressing the risks posed by leaking underground storage tanks.

U.S. PIRG thanks the Senate Environment and Public Works for providing an opportunity to testify on this important issue and legislation.

STATEMENT OF KATHLEEN STILLER, DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL, ON BEHALF OF THE ASSOCIATION OF STATE AND TERRITORIAL SOLID WASTE MANAGEMENT OFFICIALS (ASTSWMO)

Good afternoon. I am Kathleen Stiller and I am the chair of the Tanks Subcommittee of the Association of State and Territorial Solid Waste Management Officials (ASTSWMO). Thank you for inviting ASTSWMO to testify concerning S. 1850, the Underground Storage Tank Compliance Act of 2001, introduced by Mr. Chafee (for himself, Mr. Carper, Mr. Smith of New Hampshire, Mr. Jeffords, and Mr. Inhofe). ASTSWMO is a non-partisan, non-profit association which represents the collective interests of waste program directors of the Nation's States and Territories. Besides the State regulatory program managers for underground storage tanks, ASTSWMO's membership also includes the State regulatory program managers for solid waste, hazardous waste, and waste minimization and recycling programs as well as State cleanup and remedial program managers. Our membership is drawn exclusively from State employees who deal daily with the many management and resource implications of the State waste management programs they direct. As the day-to-day implementers of the State and Federal cleanup programs, we believe we can offer a unique perspective to this dialog.

ASTSWMO State members who implement the tanks regulatory and cleanup programs have discussed S. 1850 since its introduction, and find many positive features included in the provisions. However, the first thing we need to point out is that the collective requirements of this legislation on State programs involve substantial increases in State workload. As a generalization, we are obliged to tell you that most States cannot meet these new requirements without substantially increased resources. We know that this bill contains substantial increases in the levels of funding authorized for State programs, and we are appreciative of that important fact. We also understand that the Senate Environment and Public Works Committee cannot guarantee that the President will request, nor the Congress appropriate funding at these authorized levels in future years. However, if this money is not appropriated in future years, we will not be able to do the job demanded by this legisla-

[40] S. 1850, p. 18, lines 17–24, and p. 19, lines 1–16.

[41] EPA Office of Inspector General, RCRA Audit Report, *RCRA Financial Assurance for Closure and Post-Closure,* 2001–P–007 (2001).

tion. Without adequate appropriations, this would be a significant unfunded mandate for our member State programs.

This is especially true today, with State revenues down, deficits up, and many personnel restrictions and hiring freezes in place. If this legislation were to pass this year, we are afraid that some States would not be able to startup immediately, nor be able to implement a number of features in the initial years.

With that important caveat stated, let me outline the reactions of our members to a number of the specific provisions of the bill which would directly affect their State programs:

SECTION 2. LEAKING UNDERGROUND STORAGE TANKS

States' reactions to codifying a distribution to the States of at least 80 percent of the funds appropriated each year from the LUST Trust Fund indicated that State needs would probably be met if the level of appropriations is at the full level of authorization. However, if the annual LUST Fund appropriation decreases, or if it remains static as program costs and mandates increase, some State programs would experience hardship. It has been our understanding that approximately 85 percent of the annual appropriation was divided among the States, so a mandatory 80 percent distribution could actually represent a decrease under some circumstances. We believe that it is very important that the annual appropriations be increased to the proposed authorized levels to meet many pressing and vital areas in our programs which cannot be properly implemented with current funding levels. The provision in Section 2 that would authorize States to use the LUST Trust Funds to enforce State or local tank leak detection, prevention, and other requirements would be a welcome improvement to State flexibility. This too, would require increased appropriations, as today's demands on these LUST funds would not allow use of the new flexible options at current funding levels.

SECTION 3. INSPECTION OF UNDERGROUND STORAGE TANKS

Most of our members agree in principle with achieving the goal that all USTs regulated under Subtitle I be inspected every 2 years, but we have varying opinions of how practical that will be in implementation. Some think that in geographically large States with smaller tank populations, where there is already an established 3-year inspection cycle (which coincides with a 3-year cathodic protection test) and where private, third party inspectors are utilized, a 2-year inspection cycle would be problematic.

In States with a larger UST universe, the ability to implement a 2-year inspection schedule for federally regulated tanks is dependent on the State receiving and being able to use the additional funding that would be needed to hire additional inspectors and to develop an effective strategy.

We think that States without a federally approved program, but which have a mature and active petroleum leak prevention program which could be expanded to include biennial inspections of federally regulated tanks, should be allowed to receive appropriations provided by the bill to perform the same work that would be done under a federally approved program.

This new requirement for biannual inspections is probable the most resource critical feature of the bill. If it is actually funded at the $35 million level for each of the first 2 years and $20 million for every year thereafter, there is a strong possibility that the inspection rate can be increased and will result in greater compliance levels. But, if it is not fully funded, then the 2-year inspection schedule simply cannot be implemented, and the requirement to perform such a Herculean feat is not attainable.

Once the $35/$20 million appropriations authorized by S. 1850 are made, then the formula used to apportion the money among the States becomes critical. Our experience is that funds apportioned by State population or by the number of federally regulated facilities probably will come closer to matching the level of effort required. Other formulas are more problematic, especially if they are not directly connected to the cleanup or compliance target facilities.

As a final point regarding inspections, any inspection cycle must include followup enforcement and it is unclear whether the authorized level of funding in this bill includes money for conducting followup enforcement activities.

SECTION 4. OPERATOR TRAINING

The requirement for operator training could be a substantial undertaking given the turnover associated with this type of business and the number of UST facilities which varies widely from State-to-State. While it is difficult to project the scope of this training program until Federal regulations are developed, it is apparent that

owners could gain substantial benefit from reduced penalty exposure and reduced remediation costs. We do not believe that States should be expected to bear the burden of providing the training. The responsibility to provide training must remain with the owners of regulated facilities, and the final legislation should unambiguously state that responsibility.

States programs recognize the importance of UST operator training, but resources needed to implement effective operator training programs have historically not been available. The UST operator training provisions of the bill potentially represent a very significant new workload. As an example, if a State had a universe of 10,000 facilities subject to the Federal UST regulations, depending on who is considered to be an "operator" and, therefore, would become a trainee, the training program may have as few as 10,000 or a multiple of that number of students. This would be a huge undertaking.

Currently, it is difficult to make a qualitative assessment of the UST operator's training during an inspection. However, a common shortcoming we find during inspections is poor operation and maintenance that logically can be attributed to poor training or no training. Such a shortfall seriously undermines the prevention side of State UST programs.

We think that the program recommended by the Administrator will need to allow creative and innovative State implementation, and avoid a "one-size-fits-all" regulatory and funding approach. A certification requirement would help ensure that operators maintain a basic level of understanding of the equipment at the station. For example, implementation may not involve the direct delivery of such training. Rather, training programs may be created which utilize third party services. Community colleges or private enterprises may be harnessed to perform this function. Some States may prefer more direct involvement in training programs and have taken steps to offer training and have attempted to help owner/operators understand their equipment and responsibilities as onsite inspections are conducted. High turnover rates, however, have made this path difficult. Another option would be requiring owners/operators to fund the costs to administer the program and allow the States to pass these costs directly onto them or make annual funding available based on the number of active regulated UST in each State.

The key is that States don't want to be forced to provide the training directly, and to have flexibility in causing training to meet established outcomes. When considering allowing the Administrator to provide an award of up to $50,000 if a State develops and implements a State operator training strategy, State managers consider it unlikely that a one-time $50,000 award could support a program that must deal with many thousands of regulated UST facilities.

In sum, we think that the substance of the Federal training guidelines must allow flexible State oversight and design in the way training requirements are met within each State. States should have the flexibility in the way required training is delivered and paid for, and allow Federal funding use for costs of managing training efforts.

SECTION 5. REMEDIATION OF MTBE CONTAMINATION

Providing $200 million for MTBE remediation is a welcome funding increase. However, a worst-case MTBE remediation, which involves potable supply, wells, bedrock aquifers and active remediation, can reach into the millions of dollars for investigation and cleanup. Two-hundred million dollars could potentially be used up on a small number of sites nationally with large amounts of money directed toward little effective contamination recovery.

As with any cleanup, but especially true with MTBE, quick response actions can help achieve large amounts of contaminant recovery early on. The remaining cleanup could then occur with traditional State funds or responsible party/enforcement driven actions. Our members suggest that the focus should be on accelerated source and receptor control of MTBE and other additives to best leverage funding.

Additionally, $200 million for MTBE remediation should only be included in a legislative package that ensures that all aspects of an UST system are properly maintained and tested. There are components of an upgraded UST system that are considered "non product bearing" that have been found to be the source of MTBE contamination; these sources have been identified only as a result of monitoring ground water for an older release or a potable well impact.

UST "autopsy" studies of significant spills have also shown that spill buckets (that crack or become loose from fill ports) should be tested regularly; sumps that contain turbines (at which leaks occur) should also be product tight and tested regularly. Finally, requirements for dispenser pans and Stage 2 vapor recovery systems (including drop tanks) should be imposed. All these escape routine testing under the

existing Federal UST rules and have been found to be sources of MTBE contamination in many States. This aspect is particularly critical for States that can adopt rules no more stringent than EPA.

When considering chemical properties of MTBE, cleanup costs cannot be precisely calculated. Every gasoline release represents a potential MTBE site and some of us have seen MTBE contamination from leaks of other types of petroleum products such as diesel fuel and heating oil. Due to the unique physical and chemical characteristics of MTBE, the cost of remediation in some States has been driven up by 20 to 50 percent at sites with no threat to potable water. In some cases, the cost to clean up releases where water supply wells are impacted can increase by 100 percent.

In States where a cleanup guideline for MTBE has been established to address taste and odor thresholds, many more private water supply wells contaminated with MTBE must be remediated at substantial added costs.

SECTION 6. RELEASE PREVENTION AND COMPLIANCE

State program managers believe that an increase in inspection rates and followup enforcement activities would have a direct positive effect on compliance rates among UST facilities and have created priorities for targeting facilities with a higher potential for being the source of a release. Thus, some facilities are inspected more often than others to prevent releases at sites where the potential for such an incident is deemed to be higher. Generally, each time a State UST inspector completes an inspection cycle the compliance rate increases and the severity of the noncompliance issues tends to lessen. An increase in funding for States to conduct inspections, issue orders, or bring enforcement actions under this section would be very desirable. We would also like to suggest that rather than a rigid 2-year inspection cycle envisioned in Section 3 of the Bill, EPA could be required to develop a prioritization system based on risk to the environment, public health and safety, and the use of the tank. The system could require tanks in more sensitive areas to be inspected more frequently and those with higher through puts to be inspected more frequently.

Government-Owned Tanks

Historically, the compliance rate of facilities owned and operated by government agencies is generally lower than privately owned sites. This includes all levels of government, not just Federal. Local government has among the lowest compliance rates for leak prevention requirements. Many State and Federal agencies are also remiss in this area. We think that the proposed award of up to $50,000 if the State develops and implements a compliance strategy for government-owned facilities is a good provision. We strongly agree with the parallel requirements for a compliance strategy for federally owned tanks.

Incentives for Performance

States have reviewed the provisions requiring consideration of whether an owner or operator has a history of noncompliance and has been to training or has a training program before deciding to issue an enforcement action. While these are items that many States consider in making their enforcement determination, States do not want their enforcement authorities limited to only those facilities that have a history of non-compliance or have not been to or do not have a training program for operators. A violation may be of a serious enough nature that an enforcement action should be undertaken even if there is no history of non-compliance and the operator has been trained. States need discretion in their enforcement activities and this appears to limit that.

Red Tagging

States have considered delivery prohibition and "red tagging" to prohibit product delivery and generally support the use of "red tagging" as an enforcement tool. A number of States use this method, and they find it to be a highly effective method to obtain higher rates of compliance among the regulated facilities. However, the proposal for delivery prohibition should not be linked to State program approval. As in Section 9011 (1)(B) for LUST Trust Fund eligibility, the ability to use the Federal delivery prohibition should be linked to the State implementing a similar or identical Federal requirement. This could be accomplished in a variety of ways, and would provide all the States with this valuable enforcement tool.

Databases

States have considered developing a record of regulated USTs which could be made available to the public. In some States, existing databases are adequate for

this purpose. Following attacks on the United States on September 11th, some States implemented measures intended to protect sensitive information that could potentially be used to injure the Nation. The identity and location of facilities where petroleum products are stored may be regarded as potentially valuable information to terrorists. In recognition of this aspect, the authors may wish to consider modifications requiring record keeping and reporting without granting wide spread public access to precise information about individual facilities. Further, we believe that this record keeping requirement could have a very high hidden cost if some limitations are not placed on the Administrator's authority to require the data to be maintained, "in such a manner and form" as he/she shall prescribe. A clearer statement of the desired legislative outcome of this provision would help define the system eventually required.

Thank you for requesting our testimony regarding this important legislation. I would be happy to respond to any questions you might have regarding our views.

STATEMENT OF ARTHUR J. DEBLOIS III, ON BEHALF OF THE NATIONAL ASSOCIATION OF CONVENIENCE STORES AND THE SOCIETY OF INDEPENDENT GASOLINE MARKETERS OF AMERICA

I. INTRODUCTION

Good morning, Madam Chairwoman and members of the subcommittee. My name is Arthur J. DeBlois. I am president and chief executive officer of DB Companies, Inc., an independent motor fuels marketer headquartered in Providence, RI. Our company owns and operates 86 "DB Marts" in Rhode Island, Massachusetts, Connecticut and the Hudson Valley of New York. In addition, we have 84 franchisee-operated locations.

Thank you for inviting me to testify today on S. 1850—the "Underground Storage Tank Compliance Act." I appear before the subcommittee representing the National Association of Convenience Stores ("NACS") and the Society of Independent Gasoline Marketers of America ("SIGMA").

NACS is a national trade association of more than 2,000 companies that operate over 119,000 convenience stores nationwide and employ 1.4 million individuals. Over 75 percent of NACS' member companies sell motor fuels, and the convenience store industry sold more than 115 billion gallons of motor fuels in 2001, accounting for approximately 70 percent of all motor fuel sold across the Nation.

SIGMA is a national trade association of approximately 260 motor fuels marketers operating in all 50 States. SIGMA members supply over 28,000 motor fuel outlets and sell over 48 billion gallons of gasoline and diesel annually—or approximately 30 percent of all motor fuels sold in the Nation.

II. NACS' AND SIGMA'S CORE OBJECTIVES FOR UNDERGROUND STORAGE TANK REGULATION

NACS and SIGMA have been long-standing and vocal advocates for vigorous enforcement of Federal and State underground storage tank ("UST") regulations. With respect to Federal and State regulation of petroleum USTs, NACS and SIGMA have three key policy objectives:

- Ensure that an adequate percentage of funds appropriated from Leaking Underground Storage Tank ("LUST") Trust Fund is delivered to State UST programs for proper regulatory enforcement and remediation assistance.
- Ensure all UST owners and operators—including governmental agencies, commercial operators, and Native American tribes—are held to the same standards and comply with existing UST regulations.
- Facilitate prompt remediation of releases from USTs.

Some persons attending today's hearing may wonder why petroleum and convenience store marketers support effective and comprehensive enforcement of the UST regulations. Let me explain our position.

First, it is the correct and environmentally sound position to make as responsible businesses. The motor fuels marketing industry has a responsibility to our customers and the communities we serve to assure that we conduct our business in an environmentally safe manner. If marketers are not complying with Federal and State tank regulations and leaks occur, then our entire industry receives a "black eye" in the public's perception.

Second, since EPA promulgated its UST requirements in 1988, NACS and SIGMA members have spent hundreds of millions of dollars complying with the tank standards. My company spent over $5 million to comply with the 1998 deadline to upgrade our tanks. Additionally, we spend approximately $250,000 annually to main-

tain our compliance with these regulations. Clearly, if my competitors and other tank owners have not undertaken similar investments, they have enjoyed, and will continue to enjoy, a competitive advantage over companies like ours.

Finally, many of our members, including both large companies and the smaller "mom-and-pop" retailers, have closed locations as a means of compliance with the 1998 tank deadline. I testified many years ago at a hearing held by the late Senator John Chafee that, with a 10-year phase-in of the requirements, there is absolutely no reason why any UST owner and operator should not be in compliance. Tanks that have not been upgraded by now, almost 3½ years after the 1998 deadline and 13 years after the deadline was announced, should be closed. It does not matter if these tanks are owned by a Federal or local government Agency or a private concern. A tank that has not been upgraded represents an unacceptable risk to our environment and must be closed.

This point was best articulated by the late Senator Chafee in a December 1998 letter to EPA. He stated that there is no justification for EPA or the States to distinguish between private- and publicly owned tanks when it comes to protecting human health and environment. A leak from the local public works or fire department's tank causes the same environmental harm as a release from a retail gasoline outlet's UST.

Accordingly, NACS and SIGMA support the key elements of S. 1850—namely, expanding the allowable uses of the LUST Trust Fund moneys for UST enforcement; requiring every UST to be inspected at regular intervals; directing EPA to publish guidelines for training operators in the proper operation and maintenance of USTs; requiring EPA and the States to publish strategies for ensuring compliance for USTs owned by governmental agencies at every level; and providing additional funding for the remediation of certain MTBE or high-priority UST releases.

III. BACKGROUND ON FEDERAL UST REGULATION

Congress recognized in the mid–1980's that leaking petroleum USTs posed a threat to the environment. To respond to this threat, Congress mandated that all petroleum USTs must be upgraded, replaced, or closed by December 22, 1998. Despite the fact that UST owners and operators, including Federal, State, and local government agencies, knew about this deadline for over a decade, the Environmental Protection Agency recently estimated that as many as 17 percent of the Nation's USTs have not yet come into compliance.

To assist EPA and the States to implement the 1998 deadline, Congress in 1986 established the LUST Trust Fund and enacted a 0.1-cent per gallon Federal tax on petroleum products—the proceeds from which are directed to the LUST Trust Fund. Each year, Congress appropriates money from the Trust Fund to be used by EPA and the States to oversee UST corrective actions. EPA has generally allocated an average of 80 to 85 percent of each year's Trust Fund appropriations to States under cooperative agreements.

IV. CURRENT STATUS OF TRUST FUND

According to the Bush Administration's fiscal year 2003 budget, the LUST Trust Fund balance at the end of 2002 will be over $1.9 billion. Trust Fund tax collections in fiscal year 2003 will be $193 million; and, the Trust Fund will earn $113 million in interest. Despite this huge fund balance, the Bush Administration has requested only that $73 million be appropriated from the Trust Fund for fiscal year 2003—less than the amount of the interest the Trust Fund will earn during the year!

Given the media attention to UST leaks over the past 5 years, which has focused particularly on MTBE contamination of groundwater, the low level of appropriations from the Trust Fund is inexplicable. These moneys, which were collected from sales of gasoline and diesel fuel over the past 15 years, should be put to the use for which they were collected—remediating releases from petroleum USTs.

NACS and SIGMA urge this committee to use its influence to increase substantially the fiscal year 2003 appropriations from the LUST Trust Fund.

V. RECENT UST LEGISLATION AND 2001 GAO REPORT

This is not the first time that this committee has considered UST reform legislation. This committee passed narrower UST reform legislation during the 105th Congress, and the House of Representatives passed similar bills in both the 104th and 105th Congresses. Unfortunately, the full Senate never considered this committee's bill in 1998. As a result, these important legislative reforms have languished, until S. 1850 was introduced by Senator Chafee last year.

The U.S. General Accounting Office ("GAO") released a report in May 2001 entitled "Improved Inspections and Enforcement Would Better Ensure the Safety of Un-

derground Storage Tanks" (GAO–01–464). GAO concluded, in part, that EPA and the States have failed to enforce consistently the existing UST requirements. GAO estimated that, nearly 3 years after EPA's deadline of the 10-year phase-in (December 22, 1998) for environmentally protective tanks, only 89 percent of the regulated USTs had been replaced, upgraded or closed. GAO identified State and local governmental agencies and very small businesses as the primary categories of UST owners and operators who remain in non-compliance. GAO also indicated that rates for ongoing UST leak detection and compliance are lower than expected.

The GAO report contained the following recommendations to Congress:

• Increase the amount of funds Congress provides from the Trust Fund;

• Authorize States to spend a portion of these moneys on training, inspection, and enforcement;

• Authorize EPA to establish a Federal requirement for onsite inspections of all tanks on a periodic basis;

• Authorize EPA to prohibit the delivery of fuels to tanks that do not comply with Federal requirements, and establish a Federal requirement that States have the authority to prohibit fuel deliveries into non-complying tanks.

VI. S. 1850 WOULD IMPLEMENT THE GAO RECOMMENDATIONS

S. 1850, introduced by Senator Chafee and supported by a bi-partisan group of co-sponsors (including Senators Jeffords, Smith, Carper, Inhofe, Reed, and Warner), contains the following provisions to implement the GAO recommendations:

• Require a minimum of 80 percent of the funds appropriated from the Trust Fund be delivered to States;

• Permit States to use Trust Fund moneys to enforce the 1998 UST deadline;

• Require all regulated USTs to be inspected every 2 years;

• Require States to develop UST operator training programs based on EPA guidelines;

• Require States and Federal agencies to submit to EPA a strategy to ensure that all tanks operated by Federal, State, and local governments comply with existing regulations;

• Require EPA to issue regulations to authorize EPA or the States to prohibit the delivery of fuels into non-complying USTs;

• Authorize $200 million for remediation of MTBE releases; and,

• Authorize a total of $460 million in appropriations from the Trust Fund.

NACS and SIGMA strongly support S. 1850, with one suggested amendment, and urge this committee to approve this important legislation at the earliest possible date.

VII. SUGGESTED AMENDMENT TO S. 1850

There is one provision in S. 1850 that NACS and SIGMA would like to change. As introduced, S. 1850 limits the use of LUST Trust Fund moneys by State UST reimbursement funds to situations where the UST owner or operator would face financial hardships but for the reimbursement. This provision encourages non-compliance by UST owners and operators. We believe that elimination of this limitation would expedite UST clean-ups and would leverage limited tank remediation funds at the State level.

Most UST cleanups are managed by responsible parties—that is, tank owners or operators—and are overseen by State UST implementing agencies. The UST corrective action program largely has worked extremely well. As the chart attached to my testimony outlines for the States represented by members of this committee, UST clean-ups in your States are taking place at a consistent pace.

State UST reimbursement funds have expended more than $5 billion for UST clean-ups over the past decade. According to State data, most State UST reimbursement funds are solvent; however, some of these funds have been paying claims at a faster rate than the revenues they receive. A growing concern from NACS and SIGMA members is that some State legislatures, increasingly strapped for cash, might "borrow" or raid the cash balances in these State UST assurance funds. This occurred in my home State of Rhode Island during the State's last budget "crunch." Cash flow, therefore, remains critical to the success of the State UST reimbursement funds, and allowing a State to use some of its LUST Trust Fund moneys from EPA for its UST reimbursement fund is one way to leverage limited clean-up resources.

There is also a misplaced perception that eliminating the limitation in S. 1850 would send millions of dollars back to the major oil companies. NACS and SIGMA do not believe that to be the case. Most major oil companies were the first to replace

their tanks, and likely have received the bulk of any clean-up reimbursements they were owed under the State UST assurance funds.

UST owners and operators are more likely to initiate and complete tank clean-ups if they know that, after they pay the required "front end," or deductible, amount, the State UST assurance fund will timely reimburse their clean-up expenses. Stated differently, if reimbursements become stretched out over a longer period of time, the UST owner or operator has an incentive to slow down the pace of their clean-ups. Thus, limiting the use of LUST Trust Fund moneys by State UST reimbursement funds will do nothing to maintain the pace of corrective actions.

SIGMA and NACS also feel that removing the limitation also will assist with the clean-up of high-priority releases, such as MTBE contamination cases. If, for example, a small business can avoid significant legal expenses by assigning their clean-up costs to a State UST reimbursement fund, limited resources can be expended on clean-ups, rather than lawyers and consultants.

NACS and SIGMA urge this committee to make this change to S. 1850 prior to reporting the bill to the full Senate. We stand ready to work with the committee in crafting appropriate amendment language.

VIII. CONCLUSION

NACS and SIGMA appreciate this opportunity to present their views on USTs and S. 1850. We look forward to working with the committee on UST legislation and urge the committee to move this bill expeditiously.

I will be happy to answer any questions my testimony may have raised. Thank you.

ATTACHMENT

Select State Financial Assurance Funds—Design Characteristics, Funding, Level of Activity, and Current Status

State	Number of Tanks Covered	Corrective Action Covered	Fund Coverage Deductible	Annual Tank Fee	Per-Gallon Petroleum Fee	Approximate Annual Revenues (Millions)	Total Approximate Current Balance (Millions)	Total Number of Sites	Number of Sites Where Claims Have Been Paid to Date	Average Cost Per Site at Completed Clean-up Sites	Current Status of Fund
California	180,000	Yes	Between $0 and $10,000.	N/A	$0.012	$190	$215.3	28,000	8,400	$98,000	The fund is still receiving and processing new claims.
Colorado	12,532	Yes	$10,000 for clean-up; $25,000 for third party.	$35	$0.00-$0.009375	$22.6	$4.9	7,934	1,332	unknown	The fund is stable and solvent.
Connecticut	N/A	Yes	$10,000	N/A	N/A	$11	$14.2	971	1,859	$1 million	N/A
Delaware	720	Partial	$2,500	$50 (not used for State fund).	$9 mils/gallon	$1.35	$.488	115	115	$73,927	No new claims are currently being accepted.
Florida	N/A	Partial	From $500 up to 25 percent of all costs.	$50 for UST initial	$0.02	$203	$152	18,460	10,000	$200,000	The fund is stable and solvent.
Idaho	3,917	Yes	$10,000 for ASTs/USTs; $100 for heating oil.	$25 for USTs/ASTs; $5 for heating oil.	Fee suspended until surplus drops to $15 million.	Fee temporarily suspended	$30	291	117	$129,917	The fund provides insurance coverage for losses from insured tanks that occurred during the policy period.
Missouri	40,000	Yes	$10,000	None	$0.003125	$17.9	$40	3,914	1,068	$41,986	The fund insures owners/operators of USTs and ASTs containing petroleum, as long as compliance is demonstrated.
Montana	N/A	Partial	$17,500 per release	None	3/4 cents per gallon.	$6.4	$1.6	1,192	1,075	$11,780	The fund is currently reimbursing money at a rate faster than revenue is being collected.
Nevada	3,600	Partial	10 percent for regulated tanks.	$100	$0.0075 $7.5 million.	$9	$2	1,075	935	N/A	The fund is alive, well, and adding improvements.
New Hampshire.	N/A	Yes		Motor fuel: $.014/gal UST, $.001/gal AST.	$.014	$14.6	$12.9	1,843	1,398	$35,000	The fund is active in all project areas and continues to accept claims for historical and new releases.
New Jersey	30,000	Yes	None	N/A	N/A	$20	$8.7	900	600		The fund is open for businesses that submitted applications by 1/01/99.
New York	N/A	Yes	N/A	1100–2000 gallons: $50 every 5 years; 2001–4999 gallons: $150 every 5 years; 5000–399,999 gallons: $250 every 5 years.	$0.08 per barrel transferred by a MOSF.	$35	$2.4	178	N/A	unknown	The fund is a non-reimbursement fund.

ATTACHMENT—Continued

Select State Financial Assurance Funds—Design Characteristics, Funding, Level of Activity, and Current Status

State	Number of Tanks Covered	Corrective Action Covered	Fund Coverage Deductible	Annual Tank Fee	Per-Gallon Petroleum Fee	Approximate Annual Revenues (Millions)	Total Approximate Current Balance (Millions)	Total Number of Sites	Number of Sites Where Claims Have Been Paid to Date	Average Cost Per Site at Completed Clean-up Sites	Current Status of Fund
Ohio	23,575	Yes	$55,000 std $11,000 rdc.	$450/$550K deductible $600/$11K deductible.	N/A	$9.5	$43.4	unknown	2,116	$58,360	The fund will accept claims for releases occurring before and after 12/22/98.
Oklahoma	38,885	Yes	$5,000	N/A	$0.01	$27	$17.2	3,891	1,922	$77,000	The fund remains solvent.
Oregon	N/A	No, for State Remediation Only.	Not Available to Private Parties.	$85	N/A	N/A	N/A	N/A	N/A	N/A	Funded by State for State Remediation
Pennsylvania	34,940	Yes	$5,000	$.01	$0.0005	$5	$335	3,000	2,950	N/A	The fund now pays 97 percent of all claims presented with a release date of 2/01/94 or later.
Rhode Island	1,817	Yes	$20,000	0	$0.01	$4.2	$1.3	300	138	$57,024	As of May 2001, the Board was having difficulty paying the quarterly disbursement due to a severe shortfall in funds. Government entities had taken the majority of the funds.
Vermont	4,181	Partial	$250—$10,000	$200/tank	$0.01	$5	$4.1	2,300	755	$24,776	The fund is still accepting claims for new and old releases.
Virginia	43,022	Partial	$10,000–$200,000	N/A	$0.002–0.006 for motor fuel, diesel, heating oil.	$33.6	$1.9	16,038	3,760	$37,488	The fund is currently active covering all new releases with no sunset provisions.

All information is based on responses to a survey conducted by the Vermont Department of Environmental Conservation. Updated May 2001.

STATEMENT OF ROGER BRUNNER, VICE PRESIDENT, ZURICH NORTH AMERICA

Chairman Boxer, Ranking Member Chafee, members of the subcommittee, my name is Roger Brunner and I serve as a vice president with Zurich North America's Specialties business unit. Zurich North America is a unit of the Zurich Financial Services Group, the third largest provider of property and casualty insurance in the United States. My role in the organization is the management of our business that provides environmental insurance for petroleum storage tanks.

Today, Zurich North America is the leading provider of storage tank environmental insurance in the United States, insuring tens of thousands of petroleum storage tanks, which is significantly more than any other private insurer. We have been insuring petroleum insurance tanks for leakage for approximately 10 years, and we have paid to clean up thousands of leaking underground and above ground storage tanks. Therefore, legislation that impacts the operations and risk management practices of petroleum storage tanks significantly impacts our business.

I am here this afternoon to voice support for the passage of the Underground Storage Tank Compliance Act of 2001 (S. 1850). The highly efficient localized storage and delivery of petroleum is currently a fundamental component of our American lifestyle and economy, and we expect localized petroleum storage to continue for the foreseeable future. Because the delivery of petroleum as a fuel source is such a highly efficient, low margin business for petroleum distributors (and represents such a low cost product for businesses, public entities and consumers), we sometimes lack respect for the extreme complexity required for safely operating our petroleum storage and delivery system. In short, we take it for granted.

It is truly amazing that this volatile and potentially dangerous liquid can be extracted from deep beneath the surface of our planet, transported across that planet, processed in highly technical refineries, then transported, blended and stored locally. Even more amazingly, this vital product is then sold to organizations and individuals for comparatively less than a comparable amount of your favorite fountain soft drink.

The combination of the low cost storage and delivery of petroleum and the potentially significant damage by petroleum releases to human health and the environment create the need for S. 1850. This legislation is important. We believe that it will improve the environmental safety of the local storage and delivery of petroleum.

Unfortunately, our experiences demonstrate the need for S. 1850. Too often, inadequate training procedures or technical appreciation for complex monitoring devices leads to otherwise avoidable petroleum leaks. For example, last week I reviewed a case in the mid-Atlantic with my claims department that involved a petroleum retail location that had not appropriately tracked their inventory and did not know that they were missing over 10,000 gallons of fuel. Imagine if this operator really understood and executed the requirements expected of him and had stopped the release at 100 gallons instead of 10,000; the environmental contamination would have been limited, and thousands of dollars in cleanup costs would have been saved.

Or, in a classic example of the need for enhanced training, I would highlight the case in the mid-west where a local operator taped up the mis-calibrated electronic release detection system that kept flashing and making noises. Apparently, this complex electronic system had issued earlier false warnings, and was viewed somewhat like the boy that cried, "wolf" one too many times. Unfortunately, when the piping joint came apart and there was a real release, no one paid attention until it was too late.

The last personal observation I'll cite is a hospital in the Southeast that was not sure who was responsible for keeping track of the compliance obligations for its generator's diesel tanks. Because the hospital's mission is patient care, their priority was naturally to make sure that the tank was full in case the fuel was needed in event of a power outage. This important and quite expected priority on patient care, and the resulting lack of focus on storage tank compliance, missed the fact that a long, slow petroleum leak was occurring, thus causing significant environmental damage.

Each of these examples are real-life claims submitted to Zurich North America. Each was the result of poor training and compliance programs. And a significant amount of damage caused by each was avoidable.

This is why we believe that S. 1850, if enacted, will have a significant impact on the risk management practices of petroleum tank operators in the United States. By requiring and funding storage tank system compliance inspections at least every 2 years, and improving the training of regulated facility operators, S. 1850 will go a long way toward ensuring a better prepared and more technically proficient operator base. As a significant stakeholder, we believe that this is an appropriate utilization of the LUST Trust Fund.

Zurich North America urges immediate passage of this legislation. We believe that as long as local storage and delivery of petroleum are part of the fabric of our lives, environmental problems will occur. However, we believe that over several years the implementation S. 1850 will help reduce the number of underground storage tank related environmental and human health problems, and that it will be even more effective in reducing the severity of these problems that do occur in the future.

I applaud you for introducing such legislation, and look forward to working with you in the weeks and months to come.

STATEMENT OF RANDY GOLDING AND SHANNAN MARTY, TRACER RESEARCH CORPORATION

Tracer Research Corporation (Tracer) has been in the business of detecting and locating leaks from tank,; and pipelines since 1984. Over the past 18 years, the Company has tested over 3000 miles of piping and over 200,000 tanks.

Tracer is regarded as having the most sensitive leak detection test in the industry—The Company is frequently called in to Lest systems that are the subject of litigation and has frequently worked with regulatory agencies and private industry to locate release sources so they can be repaired.

Tracer is currently contracted by the State of California to perform the most comprehensive review of underground storage is and piping systems at gas stations ever performed. The case studies presented here are from the California Field Based Research project.

Tracer is making a number of recommendations today. These recommendations are based on our years of experience and observation in working with leak detection and gas stations. Some of the recommendations call for the use of increased leak detection where appropriate, others suggest that increased leak detection is not the total answer. We begin this testimony with our recommendations.

RECOMMENDATION

- Require deliveries to be monitored and signed off
- Big vapor releases are a safety and environmental hazard
- Don't commission new systems without testing them with newer, more sensitive commissioning tests
- (Commissioning test is the most important test to ever be performed at a site)

Require deliveries to be monitored and signed off.—A significant fraction, even a majority in some areas, of contamination at UST facilities does not come from the UST system itself, but is instead related to fuel handling practices. Examples of activities with significant opportunity to release fuel include deliveries, UST system maintenance, and dispensing. Increased scrutiny of delivery events has not been addressed since the inception of the UST program, in spite of the fact that it is a significant source of contamination.

Big vapor releases are a safety and environmental hazard.—Large vapor leaks in UST systems with stage IT vapor recovery systems carp release up to hundreds of gallons of gasoline vapors in the tank backfill every day. This amount of vapors contains a few pounds of gasoline. This amount of leakage can he environmentally significant. Any water that infiltrates through the tank backfill from the surface scrubs MTBE or any other oxygenate out of any vapor in the backfill and transports it quickly to the water table. Vapor leaks can be a significant source of groundwater contamination.

Don't commission new systems without testing them with newer, more sensitive commissioning tests.—Many leaks that we find in systems have been there since the system was built. Operations and maintenance dollars are most beneficially spent on systems after they are completely tight. All systems are tightness tested before they are put into service, bit the sensitivity of these commonly used commissioning tests is not good enough to protect the environment. A very sensitive commissioning or recommissioning test allows maintenance dollars to be spent on a tight system rather than a leaking one.

RECOMMENDATIONS

- Increased inspections will assist in better overall compliance but only cover what an inspector can see—they do not assess the condition of the tanks or piping. Inspections must also include sensitive leak detection tests that can identify both liquid and vapor releases.
- There is no effective hydrocarbon monitoring

• EPA needs data—Create a central database for states to annually report data

Inspections must include sensitive leak detection tests that can identify both liquid and vapor releases.—Current leak detection standard, allow for as much as 0.1 gph or 6,000 lbs. per year of liquid hydrocarbons to go undetected. Currently compliant systems are able to ignore up to 6,000 lbs. of leakage each year from each underground storage tanks—Current standards are based on the performance of systems that were current in the 1970s. Today, release detection technology, from a number of providers, has the capability of significantly more sensitivity. The Teak detection performance standard should be lowered from the current level of 0.1 gph.

Hydrocarbon vapor monitoring methods are so unreliable and ineffective that they should not he allowed.—The reasons that these methods are ineffective include the inability of these methods to deal adequately with any existing background contamination, the under-appreciated role of microbial degradation of hydrocarbons in controlling vapors and the tendency of soil to filter Borne hydrocarbons out of the vapor phase and thereby preventing the required vapor transport for these methods to be effective.

Create a central database for states to annually report data.—EPA needs some basic information about numbers of tanks, types of systems and status of those tanks and systems to make goad policy. Without that information, they are guessing.

RECOMMENDATIONS

• Different levels of staff expertise exist in different States—efforts to improve overall skill base necessary

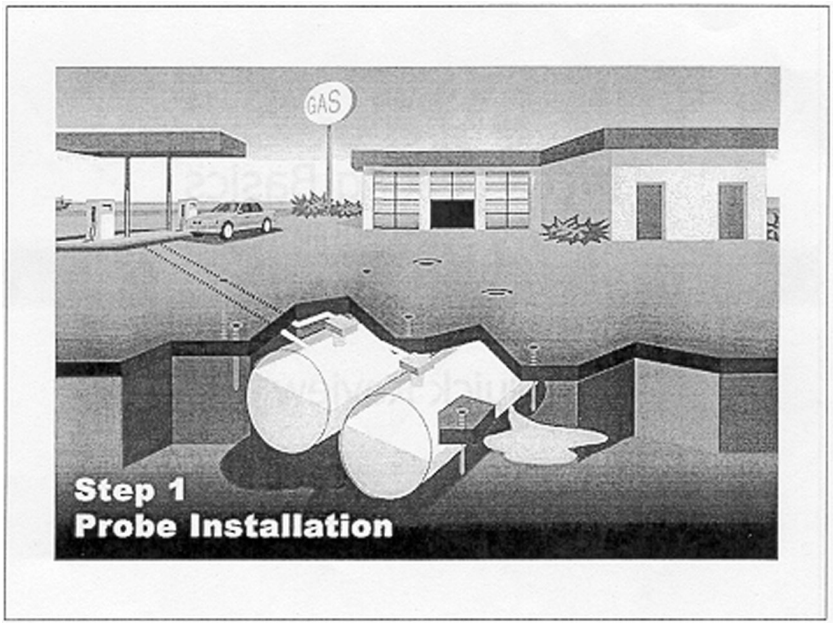
• Trust fund moneys need to be made available to States for enforcement and prevention programs

• EPA fund research an "acceptable leak rate" (amount of hydrocarbons the environment is capable of self-remediating) for new leak detection standard

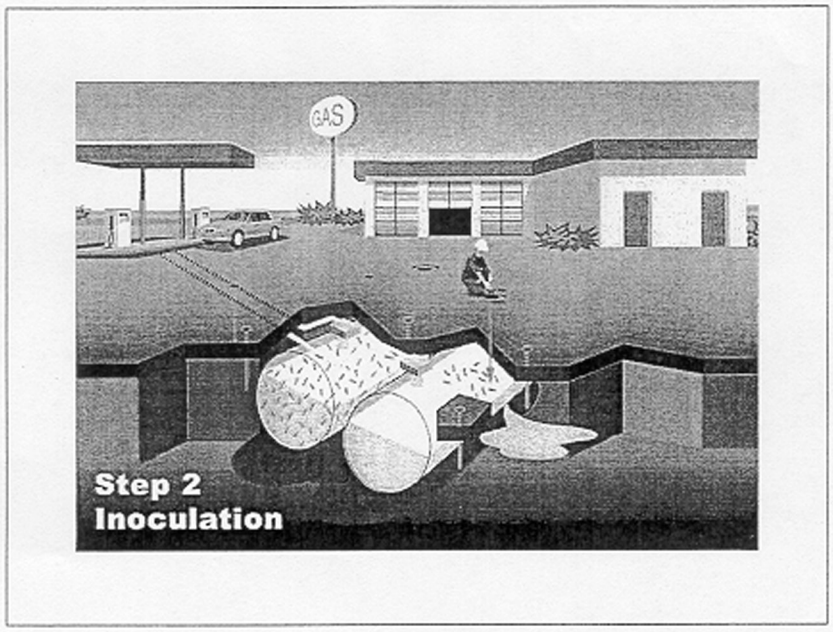
Fund research on "acceptable leak rate."—Tracer's research, as well as other groups, suggests that there is an environmentally "acceptable leak rate" that would be based on the amount of hydrocarbons the environment is capable of self-remediating. The current leak detection standard of .1 gph is based on 1970s technology. There are a number of leak detection technologies in the market place currently that are capable of detecting smaller releases. Currently, much of the market doesn't want to know about releases that are smaller than current regulations, and thus require the more sensitive technologies to 'dumb down' their tests to meet the regulatory standard.

TRACER TESTING BASICS.—A QUICK REVIEW

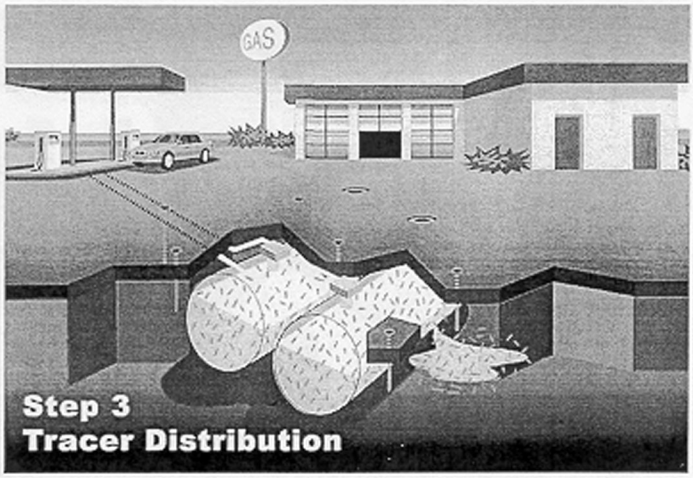
Tracer tests tanks and piping using a chemical tracer based test method. The tracer chemicals that are used are non-toxic, biologically inert, non-radioactive, and have no effect on product quality. They are placed in the system in very small concentrations and are looked for outside of the system.



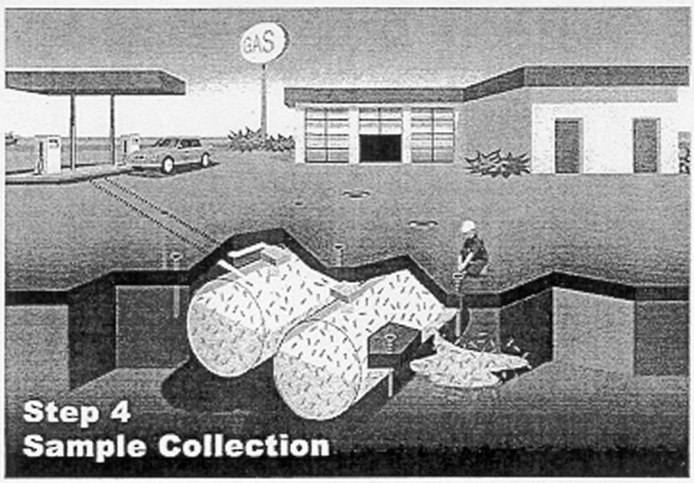
First sampling points or probes are placed through the pavement and into the backfill around tanks and pipes.



Second, a non-toxic, inert unique, easily detectable chemical called a leak indicating tracer is added to the product in the UST system.



During normal wage, the tracer is mixed with the product and because the tracer has a tendency to become a vapor part of the tracer evaporates and also mixes with the vapors in the tank. The tracer is also transported through the product piping, vent piping the vapor recovery piping. If any vapor or liquid escapes from the UST system and enters the back fill, the tracer spreads out in to the backfill in all directions as a vapor.



Finally, samples are collected from the sampling ports and the samples are analyzed to determine whether any tracer is present.

A good indicator of whether a leak is a liquid leak or a vapor leak is the ratio of the hydrocarbon vapors (TV-HC) to tracer vapors A vapor leak transports more tracer in to the backfill relative to the hydrocarbons. The bio-remedial health of a site can ale he gauged by the rate at which hydrocarbon vapors are degraded.

TRACER TIGHT® TECHNOLOGY

- Sensitive as we need to be
- Adjust sensitivity between vapor/liquid leaks
- Pinpoint locations in systems with current leaks

Tracer has Third Party Certifications that have been reviewed and accepted by EPA's National Work Group for tank and pipeline tightness tests to the level of 0.005 gph.

THE FBI PROJECT

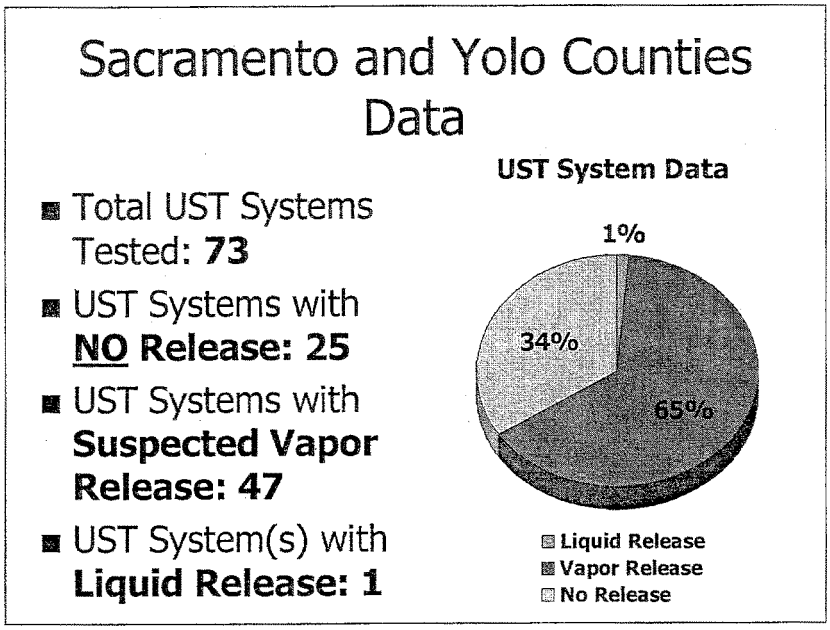
- Goal: To quantify probability and environmental significance of releases from new and upgraded UST systems
- Mandated by Senate Bill 989
- Report Completion by June 2002

The following portion of the testimony is data from the California Field Based Research Project. This project was mandated by California Senate Bill 989 that was passed and signed into law in 1999.

Sites throughout California were randomly selected and asked to participate in the study.

PROJECT OBJECTIVES/PURPOSE

1. Comparison of three major UST system groups
2. Identify system component(s) most likely to cause a release
3. Estimate environmental significance (comparison of potential for vapor versus liquid release)
4. Assess effectiveness of leak detection information



One out of seventy-three UST systems was found to have an ongoing liquid release. The leak rate was between 0.0001 and 0.005 gph or between 1 and 40 gallons per year. The Leak was due to an installation defect and may have been leaking

for a significant portion of the life of the system. This leak was too small for outdated but currently used leak detection methods to detect.

Sixty-five percent of the tanks were found to have detectable vapor leaks. Vapor leak rates varied from a few gallons of vapor per year to hundred of gallons of vapor peer day. In this random population of systems, vapor leaks were found to be orders of magnitude morn significant in terms of groundwater contamination than liquid leaks.

Tightness Frequency by Tank Type

Tank Type	Tracer ND	Pass Percent
Double-walled	16/48	33 percent
Single-walled	10/25	40 percent

Vapor leakage from double walled tanks was found as frequently as form single walled tanks, The only liquid leak found was from a single, walled pipe (that had probably been leaking since it had been installed).

Vapor Recovery System by Type

System Type	Fail/Total	Fail Percent	Tracer Average
Balance	30/48	62	0.8
Assist	18/25	72	3

Assist type vapor recovery systems have a greater tendency to pressurize the vapor space of the tank than balance type vapor recovery systems and were found to correlate with greater amounts of vapor leakage.

CASE STUDY NO. 1

- Large vapor release suspected based on TPH and tracer concentrations
  - TPH: 164 mg/L
  - Tracer: 30 ug/L
- Tank essentially venting to backfill
- Release point: Faulty drain valve into fill riser spill bucket, via separated joint in spill bucket into a containment sump, out top of containment sump and underneath manhole cover into the backfill.

This system was found to be leaking in excess of 400 gallons of gasoline vapors per day. This would account for about 2 to 3 lbs. of gasoline per day or about a thousand pounds per year. Tanks should be made to be vapor tight and should be tested to determine whether they are vapor tight.

About 30 percent of the spill buckets at the systems tested failed to hold water. The most likely cause of the watch leakage was dirt, leaves and trash in the drain valve. Unfortunately, leaking drain valves that are attached to UST systems that have a tendency to be pressurized become tanks vents that are located directly below manhole covers.

The hydrocarbon distribution at this site was high concentration and widespread. The lower explosive limit (LEL) for hydrocarbons is 20–40 percent. The hydrocarbon concentrations in the back fill at this site were 4–8 times higher than the LEL.

CASE STUDY NO. 2

- Vapor release at each gasoline tank ATG cap, no release from diesel tank
- Gasoline tanks missing o-ring for cable penetration and under pressure from pressure release vent cap
- Diesel tank, o-ring present and tank not under pressure

Sixty-five percent of the tanks in the study had vapor leaks that were detectable and ranged from very small to very large. The sources of these vapor leaks were many and varied and upon identification and location, most could be repaired.

WHAT'S BEEN LEARNED IN CALIFORNIA IN THE FIELD BASED RESEARCH PROJECT AND FROM ENHANCED LEAK DETECTION

- Gas Station systems (primary containment) work well
- Liquid releases from the systems are rare

• System liquid releases found were far below the threshold of detection equipment
• Some sites with completely tight systems still had significant amounts of liquid product on the groundwater at the site (non-system release events)
• MTBE problems exist at some completely tight facilities
• California has the most policed systems in the United States but still have significant vapor releases
• Tanks, etc. at gas stations are not designed/installed to be vapor tight
• Continual release of vapors to the backfill can be a safety as well as an environmental hazard

The California Field Based Research Project is the first comprehensive evaluation of existing UST systems ever done. The findings offer unique scientific insights to help create effective UST system policies.

One hundred eighty-two systems have now been evaluated. The updated report from the continued evaluation will be available June 1, 2002. Tracer would he happy to provide the updated report when it is available.

STATEMENT OF THE PETROLEUM MARKETERS ASSOCIATION OF AMERICA (PMAA)

The Petroleum Marketers Association of America (PMAA) submits the written testimony below for the Senate Hearing Record for the May 8th hearing on S. 1850. PMAA generally supports S. 1850, but recommends some changes to the bill as it is currently written.

PMAA welcomes this hearing, as PMAA has long sought legislation to alleviate the financial burden placed on States with regard to requirements of the Resource Conservation and Recovery Act (RCRA) and the leaking underground storage tank program. PMAA views this legislation to be of critical importance to petroleum marketers from your respective States and across the country. PMAA has been working with congressional staff for many years now to secure States their fair share of Federal funding under the Federal Leaking Underground Storage Tank (L.U.S.T.) program and is pleased to see that Senate members are interested in moving forward on this legislation.

PMAA is a federation of 42 State and regional trade groups representing some 8,000 small, independent petroleum marketers. Collectively these 8,000 marketers sell half the gasoline, three quarters of the diesel fuel and 60 percent of the home heating oil consumed in the U.S. annually.

PMAA is aware that some will try to say that the polluter isn't paying for cleanups. PMAA responds by saying that marketers, themselves, have paid into this fund for approximately 15 years for the explicit purpose of cleaning up leaking underground storage tanks. It should be made very clear that this fund is not general taxpayer money—it was funded by the industry for an explicit purpose—not to be used as political fodder for special interests. As the subcommittee members may be aware, various legislators have twice tried to raid the fund—once to pay for enforcement of the Endangered Species Act and a second time to pay for the Superfund program, which would have depleted the L.U.S.T. fund in a matter of 2 years.

PMAA and its marketer members have worked to secure passage of S. 1850, as an essential step in helping ensure that States continue to receive the lion's share of Federal L.U.S.T. funds. As you know, S. 1850, if passed, would achieve several important objectives. First, the legislation would ensure that States—by statute—receive at least 80 percent of money appropriated by Congress yearly for the L.U.S.T. program. PMAA strongly believes that this provision is critical to States to ensure that they are given the resources necessary to carry out their obligations under the Federal L.U.S.T. program mandates. It would be an injustice if States were to lose additional funding for their .responsibilities, because they are the very entities to whom Congress made mostly responsible for carrying out the requirements under RCRA.

If States do not continue to receive the bulk of the money appropriated, the requirements for leaking underground storage tanks would quickly become an unfunded Federal mandate. Passage of S. 1850, would—at the very least—assure States of their share of Federal funding, especially as budgetary constraints grow tighter.

Second, the bill would give States and tank owners and operators a greater voice in the allocation process. The bill provides that—should E.P.A. want to change the current allocation formula, it must consult with the State administrators and representatives of tank owners and operators. The bill also uses E.P.A.'s current allocation formula and adds additional criteria that E.P.A. should take into consideration.

Under S. 1850, E.P.A. would be required to also take into account the amount of revenue received into the Federal L.U.S.T. fund from a given State.

The bill requires that these criteria be considered "at a minimum", but does not prevent E.P.A. from adding additional criteria after consultation with the regulated community. PMAA feels that this is an important provision because States are ensured that there will be a variety of criteria considered, including the amount of money their marketers have paid into the fund.

Third, the bill would allow States greater flexibility regarding their use of the funds. PMAA believes that this is essential because, as States face greater demand for the clean-up funds and additional administrative and enforcement costs, Congress should provide the greatest flexibility possible.

Every State faces a different situation with regard to their respective program. The bill would allow States to use money for administration; enforcement and to aid—at a minimum—tank owners or operators who face financial hardship.

PMAA feels that this provision should be included for a variety of reasons. Primarily, PMAA urges Congress to aid in the clean-up of leaking underground storage tanks because that was the purpose intended when the fund was created. Unfortunately, only approximately 1 percent of the money has been used for actual clean-up—and that has been for the clean-up of orphan tanks where the owner or operator could not be identified and or Native American owned tanks. Clearly, there is a community need for the money to be used for actual clean-ups.

PMAA is strongly supportive of the language included in the bill, which would allow States to use Federal L.U.S.T funds for the clean-up of MTBE, which has been a growing problem for many States. PMAA would like to see the eventual phase-out of the use of the product, but believes the provisions in S. 1850 will give States an added resource to deal with the groundwater contamination that is occurring nationwide.

Using E.P.A.'s figures, approximately 99 percent of the money appropriated each year goes for administration and enforcement of the L.U.S.T. program and approximately 1 percent is spent on the clean-up of orphan tanks. For example, that means that, out of the approximately $70 million appropriated for the program in fiscal year 2002, only about $700,000 went to clean-up sites (orphan only). The rest of the money appropriated in fiscal year 2002—$69,300,000—went for the administration and oversight of the program (for both Federal and State E.P.A. enforcement).

Responsible parties will continue to clean-up sites, but PMAA feels strongly that States should be allowed the flexibility to make a decision, in certain cases, to use Federal funds for actual cleanups. PMAA's position has been and remains that the bulk of clean-ups need to be done in situations where the owner or operator can be identified but may need financial assistance.

To add background to our earlier point, PMAA and other petroleum groups actually supported the reinstituted L.U.S.T. tax of 1/10 of a cent per gallon when it was enacted. As a matter of fact, industry actually wanted a higher tax because industry believed that the fund would be used for its intended purpose—to clean-up leaking underground storage tanks and that it would be spent and used productively. Industry wanted a higher rate for two reasons, (1) to actually help later when clean-ups would become more actively pursued and (2) because there is no way to reflect such a nominal increase in the posted gasoline price. So, many marketers accepted the 1/10 of a cent per gallon tax and ate the cost because it could not be passed along to the consumer.

Now, we have a Federal fund with over $2 billion sitting idly, while States and marketers have no funds to clean-up sites. And, the yearly appropriation level has not risen in several years.

Under the Chafee bill, States would be able to spend the money for tank clean-up, administration and enforcement—wherever they believe their States could most effectively use the money. PMAA believes that States are closer to the problem and can make a more competent decision with regard to the L.U.S.T. program and spending the money wisely.

PMAA strongly recommends that the language in the bill requiring a State to conduct an inspection at least every 2 years be further clarified so States do not misinterpret that bill's intent. Currently, many States (29 at this time) have E.P.A. approved programs that they do not want undermined with this bill. In other words, marketers and State associations have spent years working with their State environmental authorities to ensure a strong tank program. In many States, electronic monitoring is already required. What would the required inspection entail under S. 1850—a review of the records, an actual thorough tank inspection, or something else? PMAA would like to see this language clarified to give the States the most flexibility possible to allow them to operate under programs they may already have in place. PMAA recommends that the subcommittee amend the bill to say ". . . if

a State has an E.P.A. approved program in place, the 2 year inspection requirement does not apply". PMAA also believes that, once a marketer, gets a "clean bill of health" after an inspection, he or she should not be targeted every 2 years with more inspections. Rather, PMAA feels the States should target their resources toward the "bad actors" rather than the entire tank community.

PMAA would also like to see language in the bill that clarifies when an inspector could shut down a tank operation to exclude paperwork violations from being sufficient grounds to stop the operation of a tank. Often, paperwork violations are the cause for a citation and should not warrant such an extreme response.

PMAA recommends that the language in the bill relating to publicly owned tanks be strengthened to include an actual enforcement mechanism, rather than simply requiring States to come up with a "compliance strategy". Industry has long known that a large number of tank leaks come from publicly owned tanks, and government and other publicly owned tanks should not be exempt from having to comply with Federal law. The bill lacks a sufficient remedy to compel Federal, State, and other public authorities to come into compliance and remedy those tanks that are leaking or otherwise not in compliance.

PMAA urges the subcommittee to approve this important legislation with the recommended changes outlined above and expedite its consideration by the full committee and Congress. The 1998 E.P.A. deadlines have long passed, but there is still a great need to get this important funding to the States and to offer them increased flexibility. On behalf of our over 8,000 marketer members, PMAA urges your support for S. 1850, with amendments.

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