Financial Responsibility
Provisions for Underground Storage Tanks in Virginia

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ABSTRACT

Under the provisions of recent federal and state legislation, the owners and operators of underground storage tanks containing petroleum products are required to maintain evidence of financial responsibility. The requirements as they presently stand, different ways of meeting them, and associated issues are examined. The regulated community is described as well as proposed financial responsibility regulations under RCRA Title I, their relevance to the situation in Virginia and to any state regulatory initiatives, and a suggested set of criteria for judging these initiatives. The next section describes allowable financial responsibility assurance mechanisms, and reviews the advantages and disadvantages associated with each. A critique follows of financial responsibility legislation recently enacted in Virginia. Conclusions and recommendations are intended to assist state decision-makers in designing and implementing an effective set of financial responsibility regulations for underground storage tanks.

INTRODUCTION

The Hazardous and Solid Waste Amendments of 1984 (HSWA) (PL 98-616) revised the Resource Conservation and Recovery Act (RCRA) (PL 94-580) by adding subtitle I which addressed the problem of leaking underground storage tanks (LUSTs). Under the HSWA, the Environmental Protection Agency (EPA) administrator had discretionary authority to decide if the owners and operators of underground storage tanks (USTs) should be required to maintain evidence of financial responsibility. The purpose of this evidence was "for taking corrective action and compensating third parties for bodily injury and property damage caused by sudden and nonsudden accidental releases arising from operating an underground storage tank" (RCRA Section 9003). The Superfund Amendments and Reauthorization Act of 1986 (SARA) (PL 99-499) removed these discretionary powers and required that regulations for financial responsibility be promulgated. Virginia is currently in the midst of developing such regulations with the passage of legislation and the development of information and program options by the Virginia Water Control Board (VWCB), the lead state agency in UST regulation. At the federal level, SARA also established a $500 million Leaking Underground Storage Tank Trust Fund, to be financed by taxes on motor fuels and used in a limited set of circumstances. This fund is discussed in greater detail later in this report.

Financial responsibility provisions may perform at least two distinct functions. One of them is to ensure that funds are available to provide for corrective action and third party compensation in case of releases from USTs. Another possible function is to provide owners and operators with an incentive to go beyond minimum federal and state requirements in managing tanks to avoid leaks. While there is currently a significant amount of discussion concerning how best to perform these functions, few states have gone so far as to implement UST financial responsibility programs. An exception is Florida which has established a unique program incorporating tank upgrading; within the first 15 months of this program, owners and operators who choose to upgrade tanks can use the state UST Fund to pay for any corrective action resulting from leaks. The state UST Fund is financed by a tax on petroleum products brought into the state (Leiter 1986). For approximately 5 years, Maine has had in place a state fund, financed in a fashion similar to Florida’s, that is used to pay for necessary cleanups and third party damages exclusive of bodily injury. The state seeks reimbursement when responsible parties can be located. In 1986, Maine handled approximately 60 claims with payments averaging $15,000 to $30,000; the highest was over $500,000 (Gorman 1987). Many other states have considered, and are in the process of reviewing, legislative proposals concerned with UST financial responsibility. However, because this area is so new, little information has been developed that state officials can use as a guide in designing an effective UST financial responsibility program.
There are many issues concerning UST financial responsibility regulations that still need to be introduced and elucidated. Generally, these pertain to: the present and future availability of financial responsibility mechanisms; their proper administration and role in the UST regulatory framework; the expected and desired impacts these mechanisms will have on the economic health of the regulated community and other involved business sectors; the administrative effectiveness of state and local UST regulatory agencies; and the environmental quality of the state and the public health of its citizenry. Conflicting opinions concerning many of these issues are held by the various individuals and interest groups involved in UST management and regulation. It is important that state and local legislators and regulatory officials, those in the regulated community, and others understand these issues before any final state UST regulatory decisions are made.

This report presents information gleaned from the relevant literature and from discussions with representatives of the insurance industry; the regulated community; and state and federal legislators, regulatory officials, and associated consultants. Much of the data and many issues not widely known or contained in a single reference are brought to light. The section on General UST Financial Assurance Information describes the regulated community, proposed financial responsibility regulations under RCRA subtitle I, their relevance to the Virginia UST situation and to any state regulatory initiatives, and a set of criteria that can be used when considering the usefulness of any particular regulatory approach to financial responsibility. In Allowable Financial Assurance Mechanisms, general information is presented as well as the advantages and disadvantages associated with each financial responsibility mechanism allowed under RCRA subtitle I. Virginia UST Financial Responsibility Legislation is a critique of the current state of UST financial responsibility legislation and is based on information revealed during the course of the research that led to the preparation of this report. The final section presents conclusions and recommendations useful to state decision-makers in designing and implementing an effective set of UST financial responsibility regulations.
GENERAL UST FINANCIAL ASSURANCE INFORMATION

I. The Regulated Community

EPA has proposed regulations establishing technical requirements for USTs that contain any regulated substance including petroleum products and hazardous substances covered by the Comprehensive Environmental Responsibility Compensation and Liability Act but not regulated as a hazardous waste under RCRA subtitle C (52 FR 12662). At this time, however, EPA's proposed regulations for financial responsibility apply only to the owners and operators of USTs that contain petroleum products (52 FR 12786). Therefore, the scope of this report is limited to this population, which is described in the preamble to the proposed regulations (52 FR 12786-12795).

The regulated community consists of the motor fuel market and non-motor fuel market. Nationally, the motor fuel market comprises approximately 40 percent of all firms and over 50 percent of the USTs coming under regulation. This market consists of: refiners; jobbers; convenience store chains; independent chain marketers; and open dealers. Refiners, who comprise a minute fraction of all of the business or firm owners in the market, own approximately 20 percent of the individual retail fuel outlets. Their ability to provide financial assurance is generally considered far superior to all the rest of the regulated community due primarily to their large capital reserves and their ability to self-insure. Jobbers, who are basically wholesalers of petroleum, own a similar number of retail outlets but comprise over 8,000 firms. Their ability to provide financial assurance varies considerably depending partly on the size of the firm in question and its ability to afford or qualify for current insurance policies that cover corrective action and third party compensation costs associated with accidental releases from USTs. Convenience store and independent marketing chains are generally larger (516 and 125 businesses operating approximately 15,000 and 5,100 retail outlets, respectively) and, as a class, are able to provide financial assurance with greater ease than the jobber class. Open dealers, those who independently own and operate one or two gasoline retailing outlets, are generally considered those least financially able to upgrade tanks, afford or maintain UST insurance, and operate USTs in a proper manner. They constitute the largest segment in the motor fuel market with more than 40 percent of the firms and approximately 40 percent of the UST systems.

The regulated non-motor fuel market consists of a multitude of segments, including mining, construction, farming, manufacturing, and local government. These segments are generally smaller and own fewer USTs per facility than the motor fuel market.

Few figures are available which accurately reflect the size and composition of
the regulated community in Virginia. There are 2,300 service stations — those with more than 50 percent of their sales from gasoline — in the state but this figure has limited utility because these service stations, with unique financial and UST management characteristics, represent only a small portion of the total number of businesses that retail motor fuel in Virginia (Catterton 1987). While approximate figures of 6,000 to 7,000 have been used to indicate the total size of the motor fuel market in Virginia, no estimates have been made of the financial and operating characteristics of the different segments in this market. Also, no size estimates or financial and UST management information has been developed concerning the UST-owning firms within the non-motor fuel market.

II. Federal UST Requirements

Under Section 9003 of RCRA, subsections c and d address the issue of financial responsibility for owners and operators of USTs. Although the EPA administrator is given the authority to establish various classes and categories of USTs, and to set a minimum amount of financial responsibility for those classes and categories which is lower than the general minimum amount established by law, this option was not exercised by EPA when it developed the proposed financial responsibility rule. Under the proposed rule, all owners and/or operators of petroleum-containing USTs that come under RCRA subtitle I authority must maintain $1 million per occurrence in financial responsibility for corrective action and for compensating third parties for bodily injury and property damage (52 FR 12788). As explained in Amount and Scope of Coverage Required, under the proposed rule owners and operators of regulated USTs are also required to maintain a yearly aggregate level of financial assurance based on the number of USTs covered by the financial assurance mechanism. EPA will develop a rule at a later date that applies to the owners and operators of USTs containing other regulated substances, about 4 percent of the USTs in the nation.

Besides requiring a minimum level of financial responsibility, the proposed federal rule also addresses many other aspects of financial responsibility. Among these are:

- applicability;
- amount and scope of required coverage;
- allowable mechanisms and combinations of mechanisms;
- substitutions of financial mechanisms;
- cancellation or non-renewal by a provider of financial assurance;
• reporting and record keeping;
• drawing on financial assurance mechanisms;
• release from financial responsibility requirements;
• bankruptcy or other incapacity of owner, operator, or provider of financial assurance; and
• suspension of enforcement.

Several of these provisions are of less importance than others. The provisions that are less subject to controversy and likely alteration by state regulatory officials seeking UST program approval are first briefly discussed.

A. Applicability

The most significant point concerning the applicability of the UST financial responsibility rule is that financial assurance is not required for state and federal entities that own or operate USTs. All other owners or operators of USTs containing petroleum products that are regulated elsewhere under RCRA subtitle I are subject to all of the financial responsibility rule.

B. Substitution of Financial Assurance Mechanisms

Continuous coverage is required under the proposed rule. Therefore, before one financial responsibility mechanism can be cancelled by the insured, another must be in place. This substitution need not be reported to the UST regulatory authority except under certain circumstances.

C. Cancellation or Non-Renewal by a Provider of Financial Assurance

Under the proposed rule, a provider of financial assurance may cancel, refuse to renew, or in any other way terminate a financial assurance mechanism only if the UST owner or operator is notified of the termination at least 120 days in advance. The owner or operator must notify the UST regulatory authority of the existing financial assurance mechanism, the name and address of the provider of this assurance and the expected date of cancellation if, within 60 days of the receipt of such notice, the owner or operator is unable to obtain replacement insurance. While the owner or operator will be out of compliance with the rule if such a mechanism has not been obtained before cancellation, the inability to obtain alternate coverage may make an owner or operator eligible for a suspension of enforcement.
D. Reporting and Record Keeping

Owners or operators of a facility are required to keep evidence of financial responsibility at the UST site or at their place of business. These records include (if applicable) copies of insurance policies and letters of credit. In addition, UST owners or operators must submit appropriate documentation of financial responsibility to the regional administrator in the following instances:

- when an UST owner or operator notifies the regional administrator of the existence of a new tank;
- within 30 days after a reportable leak has occurred from a covered UST;
- if the owner or operator fails to obtain alternate coverage within 30 days of receiving notice of:
  - a Title 11 bankruptcy proceeding naming the provider of financial assurance as a debtor;
  - suspension of the authority of a provider of financial assurance to issue a financial assurance mechanism;
  - failure of a guarantor or indemnitor to meet the requirements of the financial test; or
  - any other incapacity of the provider of financial assurance.
- if alternate assurance cannot be obtained within 60 days after receiving notice of termination of a mechanism; and
- if the owner or operator cannot meet the requirements of the financial test.

All evidence of financial assurance mechanisms must be maintained until one year after closure or one year after the completion of closure and corrective action. Records that must be kept (if applicable) include originally signed duplicates of insurance policies and copies of letters or certificates from states regarding coverage by state funds. Also, the owner or operator must maintain a certification that the financial assurance mechanism is in compliance with the requirements of the regulation.

E. Drawing on Financial Assurance

EPA requires special procedures for drawing on financial assurance mecha-
nisms such as guarantees, indemnity contracts, surety bonds, and letters of credit provided to UST owners and operators by other parties since payment under these mechanisms must be initiated by EPA or a state operating the program in EPA's stead. Among the requirements is the creation of a standby trust to be automatically funded in cases where those providing the financial assurance do not agree to pay corrective action and compensation costs when called upon to do so by authorized federal, state, or local UST program officials. As noted, an owner or operator must provide the required evidence of financial assurance within 30 days of a known or suspected release of petroleum. This is so that the UST authority will be in a position to prepare and submit the proper instructions to the provider of the assurance to channel funds into the standby trust, if necessary. The standby trust is what is then drawn upon if the owner or operator does not pay for the corrective action.

Since third party liability claims may be contested by an UST owner or operator, other provisions for drawing on financial assurances (when letters of credit, surety bonds, guarantees and indemnity contracts are used as methods of financial assurance) apply in these cases. To avoid being put into the position of a claims adjuster, EPA is proposing that the owner or operator and the third party claimant be required to submit a document that certifies the validity and amount of the claim. This certification must be signed by the attorneys of both parties. EPA hopes that this will allow third party claims to be settled in such a way that the UST owner or operator does not necessarily have to concede liability in a document that is accessible to the public and that can be used in future claims (52 FR 12821). The certification mechanism is designed to ensure that any disputes over the amounts or validity of a third party claim will be settled before the involved parties come to the agency or provider of assurance for the payment of funds.

Finally, EPA proposes that corrective action costs be paid first in situations where money has been placed in a trust fund and the costs of corrective action and third party damages exceed the amount in the fund. Third party claims are to be paid afterward according to the order in which valid claims were received.

F. Release from Requirements

EPA proposes that financial assurance mechanisms be maintained for one year after completion of permanent closure of UST systems or, if applicable, for one year after completion of corrective action and closure.

G. Bankruptcy of Owner, Operator, or Provider of Financial Assurance

EPA's proposed rule includes a requirement that any UST owner or operator named as a debtor in voluntary or involuntary bankruptcy notify the UST
regulatory authority within 10 days of the bankruptcy proceedings. Anyone named as a debtor in such a proceeding who is a guarantor or indemnitor of an UST owner or operator must notify the UST owner or operator of this situation within 10 days. An owner or operator in such a situation would be deemed to be without coverage and, hence, not in compliance with UST financial responsibility regulations. States using state funds or other mechanisms for covering certain UST owners and operators must notify those owners and operators and the Regional EPA administrator within 30 days after the assurance mechanism can no longer cover assured costs.

While these provisions are important and allow states to move beyond federal minimum requirements, others appear to be even more fundamental to any state UST financial responsibility program and to the decisions leading to its implementation. UST financial responsibility provisions addressed in EPA’s proposed rule that are likely to be more significant to the decisions made in developing a state UST program include: amount and scope of coverage required; allowable mechanisms and combinations of mechanisms; and suspension of enforcement.

H. Amount and Scope of Coverage Required

EPA’s proposed rule for financial responsibility regulations contains requirements addressing per occurrence levels of coverage, aggregate levels of coverage, apportionment of costs and levels of coverage needed under separate financial assurance mechanisms.

1. Per Occurrence Levels of Coverage

Owners or operators of regulated USTs containing petroleum products must maintain at least $1 million per occurrence in financial responsibility for the costs of corrective action and third party liability resulting from releases from their tanks plus an appropriate yearly aggregate based on the number of tanks covered by the financial assurance mechanism. While UST release events have occurred requiring expenditures exceeding this $1 million limit, neither of the two major insurers of USTs has ever had to pay this amount for a claim and EPA has determined that this level will be sufficient to cover the costs associated with over 99 percent of petroleum-containing UST leaks (Creasal 1986). The UST insurers mentioned paid an average of $50,000-$60,000 per claim in 1985 with this figure recently jumping to approximately $125,000 because of increased stringency in state cleanup requirements. A majority of UST releases (approximately 96 percent) have not resulted in the payment of damages to third parties.

2. Aggregate Levels

Owners and operators of multiple UST systems are required, under EPA’s
proposed rule, to maintain aggregate amounts of financial assurance which vary according to the number of UST systems owned or operated. These aggregates are:

- 1-12 tanks: $1 million annual aggregate
- 13-60 tanks: $2 million annual aggregate
- 61-140 tanks: $3 million annual aggregate
- 141-250 tanks: $4 million annual aggregate
- 251-340 tanks: $5 million annual aggregate
- over 341 tanks: $6 million annual aggregate

These amounts are for the total costs within a given year for all releases from USTs covered by a single financial mechanism. EPA based these aggregates on their expected ability to provide sufficient coverage for cleanup and compensation in 99 percent of the expected releases. It should be noted, however, that this 99 percent rule was not followed in the first category (1-12 Tanks). For this rule to hold, the proper category size should be 1-5 tanks. In order to minimize the economic impacts on small businesses — particularly small, rural jobbers — this tank category was expanded (52 FR 12800).

3. Apportionment of Costs

EPA has proposed to not apportion financial assurance coverage between corrective action and third party compensation because of the difficulty of predicting or estimating the relative amounts of funds needed for each type of cost and the uncertainty involved in trying to distinguish between the two, especially in cases of third party property damage. For example, if a state fund or guarantee were used to provide a $2 million aggregate level of financial assurance for corrective action for the owner or operator of between 13 and 60 tanks, an equal aggregate would still need to be provided to cover the costs associated with any third party damages. The same is true for the per occurrence levels of $1 million.

4. Use of Separate Financial Assurance Mechanisms

EPA also proposes that owners or operators who use separate mechanisms to provide coverage for corrective action and third party compensation must have the appropriate minimum per occurrence and aggregate levels of coverage for each type of cost. This was proposed for the same reasons as the requirements for the apportionment of costs.
I. Allowable Mechanisms and Combinations of Mechanisms

These mechanisms can be used as evidence of financial responsibility under EPA's proposed rule:

- financial test of self-insurance;
- guarantee;
- indemnity contract;
- insurance;
- risk retention group;
- surety bond;
- letter of credit;
- state required mechanism; and
- state assumption of responsibility.

These are discussed later under *Allowable Financial Assurance Mechanisms*.

J. Suspension of Enforcement

Suspension of enforcement is a potentially critical component of a state UST financial responsibility program. RCRA Section 9003 (d) (5) (D) authorizes the administrator to suspend the enforcement of the financial responsibility requirements for particular classes or categories of USTs in particular states for a period of 180 days or less and to renew suspension under certain circumstances. Generally, renewal of the suspension is designed to become increasingly difficult through time. In order for the administrator to grant a suspension of enforcement, he must determine that methods of financial responsibility are generally not available for USTs in a particular class or category and that steps are either being taken to establish a risk retention group for that class or category or that a state is taking action toward establishing a corrective action and compensation fund. Renewal of the suspension of enforcement may be granted only if the owners or operators in a class or category can demonstrate to the administrator that progress has been made toward establishing a risk retention group; or that the state is unwilling or unable to establish a corrective action and compensation fund and that the formation of a risk retention group is not
possible. To gain a suspension, both the UST owner and operator must be unable to obtain financial assurance. Suspension of enforcement does not apply to particular tank owners and operators unable to get financial assurance but only to UST owners and operators in a particular class, category, or state who have formed these classes and categories themselves.

An initial suspension of enforcement is available only if none of the methods allowed by EPA is generally available to the owners and operators in a class. The suspension will apply only for that portion of the required amount and that type of financial assurance not generally available to the class. The agency is proposing to consider the cost of financial assurance mechanisms when determining if a mechanism is generally available to UST owners and operators in a particular class, category, or state. Those who cannot obtain financial assurance because they fail to meet underwriting practices of insurers and who do not comply with tank technical requirements and associated schedules are not eligible for a suspension of enforcement under EPA’s proposed rule.

An owner or operator who certifies that his net worth is less than $200,000 has only to demonstrate the unavailability of insurance, indemnity contracts, and guarantees. To demonstrate the unavailability of a guarantee or indemnity contract, each member of a class must maintain written evidence that an effort has been made to obtain these mechanisms (by the class as a whole or by groups or individuals within the class) and that no qualified entity is willing to provide them. The unavailability of insurance or risk retention group coverage can be demonstrated by proof of denial of coverage from several insurance companies and by any risk retention groups known to provide coverage for USTs containing petroleum.

Under the proposed rule, to prove that steps are being taken to form a risk retention group or to establish a state fund, members of a class must: form an association and submit articles of incorporation or partnership; make a binding financial commitment of at least $2,000 per year to the association; and undertake actuarial and risk analyses to determine capitalization requirements and potential premiums.

If an applicant class does not so demonstrate, then in order to obtain a suspension of enforcement under the proposed rule, it must show that steps are being taken to establish a state fund. To do this, the applicant class must show that legislation establishing a state fund has been enacted and that the state is in the process of making the fund operational. If the legislature is in session, it must be shown that such a bill has been introduced and is pending, while if the legislature is not in session, it must be shown that an executive entity or legislator intends to introduce such a bill in the next legislative session.
Discussion: Several points need to be made concerning the suspension of enforcement requirements contained in EPA's proposed rule.

- While a suspension of enforcement can come about through the administrator's consideration of costs, obtaining such a suspension does not necessarily mean that costs will be substantially reduced. An annual fee of $2,000 is required to demonstrate that steps are being taken to form a risk retention group (which may be necessary if a state does not intend to establish an UST Fund).

- Cancellation and non-renewal of a financial assurance mechanism are cited by EPA as potential grounds for the granting of a suspension of enforcement but it is unlikely that this would occur for a class of tank owners. It is more likely to occur because of poor UST management practices or because the owner or operator cannot afford the assurance (which does not mean that other assurances will be unavailable).

- Since it has not been made clear what criteria will be used to determine when a suspension of enforcement will be granted (e.g., when is an assurance mechanism "too costly?") it is difficult to determine which owners and operators might qualify for a suspension and who other potential members of the class might be.

- While UST owners and operators not in the retail motor fuel market might be able to obtain a suspension of enforcement as a class, there is still approximately a 20 percent portion of the retail motor fuel market that does not meet insurers' underwriting standards in terms of UST management and thus does not qualify for a suspension of enforcement (Clay 1987). There is even a question as to whether those UST owners and operators not in the retail motor fuel market would qualify for a suspension of enforcement since some associations within this group have chosen not to cooperate with requests for UST information made by at least one UST insurance marketer.

III. UST Management in Virginia

In Virginia, leaking USTs (LUSTs) are a primary source of groundwater contamination. Seventy-five percent of the groundwater contamination incidents documented by the VWCB (97 out of 129) in fiscal 1985 involved petroleum. While many of the incidents were of unknown origin, the vast majority of those with an identified source involved USTs (VWCB 1986). While there are no current regulations requiring UST owners or operators to maintain evidence of financial assurance, there is some authority in Virginia to make financially responsible those owners and operators whose USTs develop a leak. The Virginia Water
Control Act empowers the VWCB to issue cleanup orders and to impose civil penalties on anyone responsible for a release of petroleum from an UST into the environment (Virginia Code Section 62.1-44.15). However, it seems the resources needed to deal with the problem are not sufficient.

**Discussion:** Although it is against state law to release petroleum products into the groundwater, giving the VWCB the right to seek reimbursement for money spent for corrective action, and there are common law remedies for damaged third parties to use in seeking compensation, these mechanisms have limited utility (Cox 1986). Often the parties responsible for a release are not known or do not have the money to perform corrective action or to provide compensation and when they do, an extended and costly court suit might result. Also, the VWCB has a significant amount of discretion as to when a leak gets cleaned up and to what degree. The result can often be that leaks are cleaned up over long periods of time and to varying degrees.

Recently, two bills were passed in the Virginia Legislature authorizing the VWCB to establish a state UST regulatory program and to develop financial assurance requirements based on the guidelines set forth in the legislation. The bill concerning financial assurance requirements is discussed in greater detail later in this report.

**IV. Virginia UST Data**

The following data provide a general perspective on USTs in Virginia and their owners and operators.

- Of the approximately 60,000 USTs at 22,000 sites in Virginia, most are unprotected steel and over 40 percent are more than 16 years old (Virginia Gasoline and Automotive Repair Association).

- It is not known how many owners are associated with the tank population. Although the number of tanks has been approximated, the number of owners and operators (and hence the number of occurrence and aggregate assurance mechanisms) is not known. Also, the different types of owners and operators are not known (e.g., motor fuel retailers, car rentals, truck fleets, etc.) (Catterton 1987). Since certain assurance mechanisms are available only to certain owners and operators (for example, insurance is available mainly to motor fuel retailers and wholesalers) and since the number of these is not known, the potential economic impact brought on by the availability and unavailability of the financial assurance mechanisms is also not known.

- Many owners and operators of USTs probably think their General
Liability Insurance (GLI) covers leaks from USTs whereas, in fact, it does not. Most owners and operators (other than such large corporations as major oil companies, which generally insure themselves) are probably not covered for UST leaks apart from what their own savings can provide. For instance, unless specifically provided for in a risk retention group or self-insurance scheme, municipal governments are not insured or otherwise covered for expenses related to leaks from USTs.

V. State Financial Responsibility Program Evaluation Criteria

Several criteria can be identified that are useful in determining the effectiveness and fairness of a proposed state financial responsibility program.

- The state’s provisions should, at a minimum, make it possible for all classes of regulated tank owners to meet the federal requirements.

- The costs should be reasonable and, in keeping with the “polluter pays” principle, should fall wholly or mostly on the tank owners and/or operators themselves.

- Tank owners and operators should be given an incentive to engage in leak prevention and detection and tank upgrading to the extent possible or, at a minimum, they should not be discouraged from doing so.

- Administration should be kept simple and should facilitate rapid corrective action, when needed.

With these criteria, it is helpful to look at the usefulness of the individual components that can go into a state UST financial responsibility program.
ALLOWABLE FINANCIAL ASSURANCE MECHANISMS

I. The Federal Leaking UST Trust Fund

The Superfund Amendments and Reauthorization Act (SARA) established the $500 million Leaking Underground Storage Tank Trust Fund to be used in the following circumstances:

- When, within 90 days or such shorter period as may be necessary to protect human health and the environment, no owner or operator can be found who is subject to the corrective action regulations and capable of carrying out such corrective action properly;

- If prompt action by the EPA or a state is necessary to protect human health or the environment;

- If corrective action costs exceed the required amount of financial responsibility and, considering the class or category of UST, expenditures are necessary to assure an effective corrective action; or

- If the owner or operator has failed or refused to comply with an order to perform corrective action.

If an owner or operator has not complied with applicable financial assurance requirements, the Fund can be used only when:

- there is no financially solvent owner or operator;

- immediate action is required in response to an imminent and substantial endangerment of human health and the environment; or

- the necessary action involves temporary or permanent relocation of residents, alternative water supplies, or an exposure assessment, undertaken to protect human health.

Discussion: The Federal Trust Fund is an important tool that can be used to cover the costs of corrective action in certain circumstances. Three points, however, need to be made concerning the use of this fund:

- It does not cover costs of third party damages, only of corrective action.

- Its use is controlled by the EPA. Therefore, any state program that depends on it in every potentially applicable situation may find it not broad enough in coverage since there is no guarantee that it will be used in each of these instances.
• After federal regulations are promulgated, states must pay 10 percent of the cost associated with a corrective action paid for using the Fund.

Therefore, the Fund is probably best used as an emergency source of revenues in unusual situations and not as an integral part of a state’s program to insure that money is available for the costs associated with a release from an UST.

II. State Fund or Other State Assurance

EPA will review and approve state funds or other state assurances that provide assurance at least equivalent to that provided through other allowable mechanisms. The proposed rule requires that the person within the state government who administers the UST financial responsibility program or who authorizes state fund expenditures must describe, in a letter to the regional administrator, the class(es) of tanks covered and the types and levels of coverage provided.

State funds can be very broad in scope, covering all of the corrective action and third party compensation costs for broad groups of tank owners, or they can apply to a very narrow range of situations, such as abandoned tanks only. There is a wide spectrum between these two extremes: an example might involve requiring some level of coverage by the individual with the state covering the remainder. Many states, including Virginia, are in process of establishing some kind of fund that can be used to cleanup leaks from USTs.

Discussion: The use of a state fund as a method of providing financial assurance under RCRA subtitle I also has some limitations. To summarize:

• Generally, the more comprehensive in coverage a fund is, the more resources (human and financial) will be needed to ensure that it is effective. Large, comprehensive funds require a great deal of manpower and money and are complicated to administer because of the review process that has to occur before any disbursements from the fund or reimbursements to the fund can be made.

• Depending on its precise nature and its source of financing, establishing a fund that covers the costs associated with leaks from USTs may be viewed as contrary to a commonly held concept that the “polluter pays.” Not only might such a fund be considered by many to be morally wrong, but it might also remove some or all of the incentive for the UST owner or operator to properly maintain his tank system. A fund financed by general tax revenues might be viewed as more inconsistent with the concept that the polluter pays than a fund financed by registration fees on USTs but both still reduce, to varying degrees, the incentive for leak prevention and detection beyond minimum regulatory requirements.
• Perhaps most significant, in a pragmatic sense, is that a fund covering third party compensation would put the state in a position of protecting its (the public's) interest in not paying unjustified claims while simultaneously being responsible for looking after the interests of third parties damaged by the activities of those who have acted against state policy by polluting state waters. This confusing, potentially contradictory situation, which may prove costly in time and money to resolve, is especially important because any fund seeking to relieve the level of coverage needed by the individual UST owner or operator would have to cover third party compensation under RCRA subtitle I. If it did not, the same coverage would still be required by the individual since one cannot apportion costs between third party compensation and corrective action.

Thus, like the federal fund, state funds have limitations in applicability and scope. While a fund for cleaning up abandoned UST sites may be feasible, a fund with broader applications may: (1) be difficult to administer; (2) reduce or eliminate incentive for proper tank management; and (3) ultimately make the minimum federal financial assurance requirements no less stringent on the UST owner and operator.

III. Insurance

Insurance will be the most generally used financial assurance mechanism because it is the only one that most UST owners and operators will be able to afford. While insurance for leaks from USTs is written sporadically on an individual basis by some companies, as of August 1987 only two insurance firms specifically market this kind of coverage to a large group of UST owners and operators (Clay 1987). Still, this coverage is not widely available.

Although technically a separate policy, one insurance company offers UST coverage only if the company's General Liability Insurance is purchased by the tank owner or operator. The other company offers UST coverage by itself, but only to motor fuel retailers and jobbers (firms involved in wholesaling motor fuels) who belong to industry trade associations. The coverage is not generally available to the individual station owner (open dealer) or to those outside the motor fuel market. There are currently no plans underway to offer this insurance to those firms outside the motor fuel market. This is because the UST insurance industry perceives a general lack of UST management experience in these firms, a lack of UST actuarial information about these firms and a lack of interest from these firms in obtaining this type of coverage. However, one company plans to offer insurance to open dealers in the near future thus providing them (the majority of motor fuel retailing firms) with a means of complying with EPA's proposed rule for UST financial assurance under RCRA subtitle I (Clay 1987). Yearly premiums for these individually owned and operated stations are expected
to be approximately $2,500. For purposes of comparison, a firm owning five stations would pay approximately $650 per station for equivalent coverage.

Policies written by these companies generally are for $1 million per occurrence and either $1 million or $2 million aggregate per year. Third party liability is covered as well as cleanup. Deductibles range from $5,000 to $100,000. Approximately 20 percent of the applications for coverage are turned down yearly because the firms do not meet underwriting standards. These standards tend to exclude USTs that are very old, operations with poor release records, and firms that do not perform inventory control to monitor for product releases. Those UST owners and operators who cannot obtain insurance are usually those most likely to need insurance because of the poor condition of their tanks (Clay 1987).

It should be stressed that the size of the UST-owning community not marketing motor fuel is significant and includes many small businesses that might not be able to afford another kind of financial assurance. This could possibly make this part of the regulated community eligible for a suspension of enforcement.

Discussion: These points should be made concerning the utility of insurance as a mechanism for providing UST financial assurance under subtitle I of RCRA:

- While UST insurance is currently available to some UST owners and operators, many others are unable to obtain it because: they cannot afford it; they do not belong to the motor fuel market; or they belong to the motor fuel market but either are unacceptable risks or do not belong in a market segment currently being offered UST insurance. This number represents the vast majority of the firms that might need to use insurance to meet the financial assurance requirements.

- UST insurance for open-dealers (i.e., owners of only one or two motor fuel retailing outlets) will probably be made available in the near future but approximately 20 percent of these firms can be expected to be turned down by insurance marketers, at least in the short run, because of the lack of inventory control; old, unprotected USTs; and poor release records. UST owners and operators not in the motor fuel market may be able to qualify for a suspension of enforcement.

- Insurance premiums might be reduced by lowering required coverage levels and then supplementing these lower levels with some kind of UST fund. Premiums could be reduced if coverage requirements were lowered since, from an insurance standpoint, it is easier to predict claims below a certain limit than above that limit. One insurer providing UST coverage on the condition that its General Liability Insurance (GLI)
is purchased stated that lowering coverage levels from $1 million to $500,000 would reduce premiums by 25 percent (Droher 1987). However, this reduction may not be significant when compared with the increased costs brought on by having to change to a possibly more expensive GLI package. Others involved in UST insurance have stated that, since most claims are for less than $100,000, lowering coverage requirements to the $100,000 level would not significantly change premiums. It has also been observed that administrative costs for writing insurance policies are essentially fixed, and therefore are not affected by lowering coverage levels.

IV. Risk Retention Groups

Like insurance companies, risk retention groups function by transferring individual risks to a larger "risk pool" which can then be managed by the group or association itself. The members of the association pay a premium based on their expected losses while the cost of the losses is borne by the whole group. The most important aspect of the requirements pertaining to risk retention groups in RCRA subtitle I is that the groups issuing coverage must "be chartered and licensed in at least one state and be authorized to operate in each state where a covered underground storage tank is located."

Discussion: While risk retention groups seem to hold some promise as a method of demonstrating financial assurance under RCRA subtitle I, there are also limitations. Risk retention groups may not really be a viable option for those both within and without the motor fuel market unable to afford or obtain insurance because: risk retention groups are at least as expensive as insurance policies since, in effect, this is what they are, and they require members to fund the initial capitalization; the group of potential members in any one class of UST owners suffer from the same characteristics that make them a bad insurance risk in the first place, making the risk pool just as non-viable as insurance. Also, in order for a class of UST owners or operators to obtain a suspension of enforcement on the grounds that it is trying to establish a risk retention group, each member of that class must contribute at least $2,000 a year for the initial capitalization of the group. Thus, those most in need of a risk pool probably would be least able to afford to start one and to keep it viable.

V. Financial Test of Self-Insurance

The financial test is the instrument by which a firm demonstrates that it is capable of meeting its financial assurance obligations through its own financial capacities as set out in RCRA subtitle I. This test must also be used to qualify guarantors and indemnitors to provide guarantees and indemnity agreements to UST owners and operators.
Among the more substantial requirements for qualifying as a self-insurer is that the firm have a tangible net worth equal to at least ten times the appropriate annual aggregate, or not less than $10 million. For example, a firm with between 61 and 140 USTs would have to have, among other things, a tangible net worth of at least $40 million in order to use the financial test of self-insurance as a means of providing financial assurance.

**Discussion:** Few firms will find this a viable option. Those using it are likely to be major oil companies, some large jobbers, and other large corporations.

**VI. Guarantee**

A guarantee is a promise by one party (the guarantor) to pay certain debts or perform certain duties of another party (the principal) in the event that the principal fails to satisfy those debts or duties. Under RCRA subtitle I, related firms or firms engaged in a substantial business relationship with the UST owner or operator can provide the guarantee.

**Discussion:** While this relationship allows jobbers to act as guarantors to their customers (if such mechanisms do not conflict with state insurance laws), this arrangement is not necessarily going to become popular. First, the guarantor must pass the test of self-insurance which most will not be able to do. Second, there is a trend among owners and suppliers toward making tank operators, not owners or suppliers, financially responsible for leaks as an incentive to improved UST management. There is no reason to assume this trend will change simply because this form of guarantee now has official approval by regulation.

**VII. Indemnity Contract**

Indemnification is a two-party contract whereby one party can obtain protection from another against future losses or harm. Under RCRA subtitle I, in order to provide an indemnity to an UST owner or operator, a firm must be involved in a substantial business relationship with that owner or operator and must pass the financial test of self-insurance.

**Discussion:** Like the guarantee, this form of financial assurance has little application to those who cannot afford or obtain insurance or qualify as a self-insurer.

**VIII. Letter of Credit**

A letter of credit is an instrument through which a financial institution (the insurer) undertakes to meet a monetary obligation of its customer (the account party) if the latter fails to do so. A fee is charged by the institution for this service.
For a letter of credit to be used, it must be certified by the attorney general that it is valid and enforceable in a given state. Like the previous three financial assurance mechanisms, letters of credit are only available to firms with the ability to meet large financial obligations. Also, to obtain a letter of credit, the UST owner or operator would have to have a strong customer relationship with the issuing institutions. Several banks have indicated that letters of credit are available only to large businesses with very good, active banking reputations.

IX. Surety Bond

Surety bonds guarantee that if an UST owner or operator does not perform corrective action and third party compensation in accordance with state or federal requirements, the surety will either perform those functions in accordance with regulations or fund the standby trust up to the level of the bond. Like the letter of credit, the surety bond must be certified by the attorney general of any given state as a valid and enforceable mechanism. Surety bonds, like letters of credit and guarantees, are substantially more expensive than insurance. The cost for a surety bond is approximately $20 per $1,000 of coverage required. This would raise the cost of financial assurance to $20,000 a year if one were seeking the proposed aggregate levels of financial assurance ($2 million) needed by owners or operators of between 1 and 12 tanks. The surety industry has expressed little interest in underwriting bonds for post-closure care or for corrective measures. Surety bonds continue to have very limited availability. Generally, they are available only to financially strong firms with limited environmental risks that are important customers to the insurance companies issuing the bonds (Ocasio 1985).

X. Summary of Financial Assurance Mechanisms

It is apparent that many of these financial assurance mechanisms provide little assistance to the firms that most need them. Small firms outside the motor fuel market are likely to be able to obtain a suspension of enforcement while larger firms in this sector will probably be able to self-insure because their aggregate levels of coverage and, hence, net worth can be relatively small since they own fewer USTs. Risk pools are of limited value as are such mechanisms as letters of credit and guarantees. A significant portion of the retail motor fuel market, at least in the short run, will be unable to obtain insurance because of tank age and UST management practices. In the longer term, implementation of the UST technical requirements should make the currently “uninsurable” elements in the regulated community a more attractive insurance risk. In the meantime, however, few solutions have become apparent. Virginia’s proposed UST Fund has some weaknesses. In order to understand these problems, the following section addresses the characteristics as well as some of the advantages and disadvantages that have been identified.
VIRGINIA UST FINANCIAL RESPONSIBILITY LEGISLATION

Recently, H 1022 was signed into law by Governor Gerald Baliles giving the Virginia Water Control Board responsibility for developing and implementing a financial assurance program based on requirements in the legislation. In summary:

- H 1022 establishes the Virginia Underground Petroleum Storage Tank Trust Fund. This nonlapsing, revolving fund, which will have $5 million placed in it for the first year of its operation, is to have all moneys received as reimbursement put back into the fund. Uses of the fund relevant to paying the costs associated with corrective action and third party liability resulting from leaking USTs include:
  
  1. Paying the costs of corrective action caused by the unauthorized release of petroleum from a regulated UST between the required minimum financial responsibility of UST owners and operators and $1 million;
  
  2. The costs, up to $1 million, of third party compensation caused by a similar release; there is no mention of required minimum financial responsibility levels for third party compensation needed before the fund can be used for this purpose;
  
  3. Costs incurred by the VWCB for corrective action if, in the judgement of the Board, such action is necessary to protect human health and the environment; no maximum disbursements or third party uses are mentioned; and
  
  4. Corrective action costs, up to $1 million, resulting from leaking USTs whose owner cannot be determined within 90 days or whose owner or operator is incapable of carrying out the corrective action properly.

- Generally, money expended from the fund for corrective action can be recovered without limit when the owner or operator has violated substantive UST regulations promulgated by the Board. Specifically, money expended from the fund for corrective action can be recovered up to minimum requirements from responsible owners and operators under the following circumstances:
  
  1. Costs incurred when immediate action is necessary to protect human health or the environment;
2. Costs incurred from corrective action associated with USTs whose owners and operators cannot be identified within 90 days of a petroleum release and those whose owners and operators are incapable of carrying out the corrective action properly at the time of the release.

- For money expended from the fund "as compensation for personal injury, death or property damage," the VWCB has the right of subrogation. No mention is made of recovery being only up to minimum financial responsibility requirements, as is the case for corrective action.

- Owners and operators of regulated USTs are required to maintain financial responsibility for leaks through use of the following mechanisms: insurance; guarantee; surety bond; letter of credit; or qualification as a self insurer. The financial responsibility must be maintained at these minimum levels:

  1. corrective action - $100,000 per occurrence
  2. third party compensation - $300,000 per occurrence

- Owners or operators who cannot maintain financial responsibility using the mechanisms mentioned may establish an insurance pool. While there are many requirements in the legislation which govern how an insurance pool must be established and maintained, there is none similar to the federal minimum of a $2,000 annual contribution from potential members of a risk pool as evidence that they are, in fact, attempting to establish one.

- Finally, the administration of the UST Fund and the other provisions of the state UST regulatory program is to use no more than $250,000 a year from the fund itself.

I. Discussion

The use of such a fund is very new and little experience has been gained concerning how it might best be designed and administered and what pitfalls should be avoided. However, these general comments can be made:

- **Lack of Annual Aggregates:** By not requiring annual aggregate levels of coverage for firms owning or operating different numbers of USTs, the law does not conform to the federal minimum requirement and leaves open the question of how such aggregate levels might be incorporated into an UST financial responsibility program of this kind.
Separation of Coverage: Insurance industry representatives have indicated, consistent with findings in the preamble to the proposed rule in 52 FR 12664, that it is often very difficult, if not impossible, to separate the costs associated with leaking USTs into those for corrective action and those for third party compensation. If this is the perception held by the existing UST insurance industry, it seems unlikely that the industry will be willing to prepare two kinds of policies for risks that it normally views as aggregated.

Third Party Compensation: According to the language of the law, costs associated with third party compensation can be recovered in full by the VWCB, instead of only up to the minimum level required by the law for this category of costs, $300,000. For example, for an UST release requiring $600,000 in corrective action and $301,000 in third party compensation, assuming this distinction could be made, the Board would normally attempt to recover $100,000 for corrective action (the minimum financial responsibility requirement) while it might seek the full $301,000 for third party compensation.

Given the difficulty of distinguishing between corrective action and third party compensation, there is an obvious incentive for tank owners (and/or their insurers) to ensure that as many of the costs as possible fall into the former category.

Protection of Tank Owners: Although the reduced financial responsibility requirements imposed on individual tank owners by the state law may allow them to achieve legal compliance at a lower cost (if their insurance premiums are indeed reduced), as long as the state can subrogate for the full costs of third-party damages, the owners will remain financially at risk if they opt for the lower level of coverage. The fact that many owners have chosen to carry insurance, typically at $1 million per occurrence, even before imposition of the financial responsibility requirements suggests that many will continue to seek greater coverage than the state law requires.

State Interest in Third Party Damages: Because the state has an interest in seeing that monies expended from the Fund for third party damages are for legitimate costs only, it may be difficult to avoid a situation where the state becomes involved in most or all third-party settlements. In effect, the state may have to play the role of a claims adjuster, in which it attempts simultaneously to protect both the interest of the injured party and its own interest in the Fund.

Decreasing Incentive: Limiting liability to a level below that of federal
minimum requirements may reduce the incentive for owners and operators to practice proper release prevention and detection and upgrade UST practices beyond regulatory requirements. Also it is contrary to the concept that the “polluter pays” for damages associated with his activities. However, the effective use of minimum levels of financial responsibility, eligibility requirements, and enforcement mechanisms could still retain a significant amount of incentive for owners and operators to “operate clean.”

- **Insurance Pools:** Since forming an insurance pool may take a significant period of time, a suspension of enforcement may be necessary. Without a provision in the law requiring a $2,000 contribution by potential members of the insurance pool, a suspension of enforcement may not be possible under proposed minimum federal requirements.

- **Reimbursement of Insurance Companies:** In cases where the cost of corrective action exceeds the minimum financial responsibility requirement imposed on an individual owner, thereby qualifying for payment from the state UST Fund, H 1022 does not specify a mechanism for paying the “first dollar” over the $100,000 minimum. If an insurance company initially pays for the entire cost of cleanup, the point at which reimbursement will be made is not clear. Presumably, this will be clarified in the regulations to be promulgated by the VWCB. However, representatives of the insurance industry are concerned that reimbursement not be delayed until the cleanup is “complete” since this may take many months or even years.

- **Costs of Program Operation:** There is a question as to whether the sum of $250,000 a year is adequate for administering the entire state UST program, including both the technical provisions contained in H 682 and the financial responsibility provisions contained in H 1022.

II. Critique of Virginia’s Law with Respect to Pre-Specified Criteria

A. Likelihood of Meeting the Federal Requirements

Where available and reasonably priced, insurance provides a well-established method for individual tank owners to meet the financial responsibility requirements. The problem is that UST leak insurance coverage is currently available only to tank owners who belong to a group marketing association or a jobbers’ association. It is likely that insurance will soon be offered nationally to independent gas retailers but not to those who do not themselves market petroleum products; thus tank owners such as car rental firms, trucking companies, and government agencies will continue to have difficulty in finding insurance.
Otherwise-eligible tank owners who are considered to be "bad risks" (e.g., due to a poor claims' record) may also be refused.

The rationale behind Virginia's lower level of individual financial responsibility compared to that imposed by the federal legislation appears to be tied to the assumption that coverage at this lower level will be available to a wider range of tank owners and that the cost will be reduced for all who are eligible. However, this assumption may not be valid.

Most UST insurance policies are currently written for $1 million of coverage per occurrence, with a $2 million annual aggregate. Experience suggests that most incidents involve costs that are less than $100,000, with very few exceeding $1 million. There may be a tendency for these costs to grow, at least in the short term, because of a demand for greater stringency in cleanup and, possibly, an increase in payments for damages; on the other hand, implementation of the tank standards required by RCRA is intended to reduce the frequency and severity of future leaks. Under these circumstances, there is no assurance that lowering the level of required coverage will have any effect on the availability of insurance to different classes of tank owners.

The provision in the Virginia law which authorizes, but does not guarantee, the establishment of an insurance pool may not solve the problem because the owners who might be most in need of a pool are probably the ones most likely to render it insolvent. Furthermore, individual tank owners who do not qualify for insurance are also unlikely to qualify for letters of credit, surety bonds, or other means of demonstrating financial responsibility. Self-insurance is likely to be an option in only a limited number of cases.

For these reasons and because the upper limit of the state trust fund was apparently set with little or no regard for actuarial considerations, the law may fall short of demonstrating adequate financial responsibility in aggregate and the minimum provisions of the Virginia legislation may not fully satisfy the federal UST requirements.

B. Level and Distribution of Cost

For the most part, UST insurance in the U.S. is currently available from only two companies. For coverage of $500,000 per occurrence instead of the more typical $1 million per occurrence, one of these companies has said that it would reduce its premium by 25 percent; however, since the company offers this coverage only to those who also purchase its general liability policy, the true cost to an individual UST owner or operator is difficult to assess. The difference in cost of the retail outlet's current GLI policy and the GLI policy of the company providing the UST coverage must be considered. The other company currently quotes
annual rates ranging from about $1,000 to $2,500 per location for coverage of $1 million per occurrence, $2 million aggregate, depending on the number of locations covered by a single policy, the level of deductible (from $5,000 to $100,000), and other factors. New clients, especially independent retailers when coverage becomes available, are likely to pay at the higher end of the scale. Because of the fixed costs involved in writing policies, as well as the fact that most claims have been below $100,000, a reduction in coverage to the minimum levels specified in the Virginia law may result in little or no reduction in premiums. It is unknown what rates would have to be charged for membership in a risk pool of the kind authorized by the Virginia law if the pool is to remain viable. Thus the Virginia law may do little or nothing to reduce the costs that must be borne by individual tank owners.

Contrary to the “polluter pays” principle, however, the law will shift part of the cost of demonstrating financial responsibility for USTs to state taxpayers. Some consideration was given early in the legislative process to the possibility of financing the state UST Fund from tank registration fees but this idea was dropped, partly, it appears, because of the administrative costs involved in establishing a new mechanism for revenue collection.

C. Incentive for Leak Prevention

There is fairly broad agreement that leak prevention is less costly and more desirable than leak correction. The more the individual tank owner (or the owner’s insurance company) is relieved of the responsibility of paying for corrective action and damages, the less the incentive for the owner to engage in leak prevention. The Virginia law is likely to reduce the owners’ level of responsibility in this respect and may, therefore, tend to reduce the incentive for aggressive leak prevention. However, in order to take advantage of the state fund, owners must be careful to comply with all applicable rules and regulations. Moreover, the fear of losing insurance coverage (for protection under some other financial assurance mechanism) may provide further incentive to maintain an untarnished loss record.

D. Administrative Simplicity

From an administrative perspective, the simplest system would be for the state to require each tank owner to demonstrate that the federal requirements for financial responsibility are being met. However, this would not address the fact that some classes of tank owners are currently unable to do so; nor would it deal with the problems created by leaks from orphan tanks, the situations invoking emergency corrective action, and other similar situations.
The wording of the Virginia law is vague about the precise role to be played by state officials in operating the new program. At a legislative hearing on the law, it was suggested that these officials may be active not only in responding to and investigating reports of suspected leaks but also in arranging for corrective action. Experience in the insurance industry, however, suggests that (where applicable) corrective action is likely to be initiated more rapidly and with greater effectiveness if it is arranged directly by an insurance company, following notification by the policy-holder. The insurance company has a clear financial incentive in most cases to move quickly so that the problem is contained and liability is minimized.

The Virginia law is unusual among UST bills proposed or enacted in other states to date in that it provides for state-fund payment of third party damages as well as the costs of corrective action. In this respect, the law is more consistent with the federal requirements than most others; however, once again, the wording is vague and does not specify the role, if any, that state attorneys-general or commonwealth's attorneys might play in court actions for third party damages. Since the state UST Fund would be at risk in a third party damage suit, there is some concern that the state would always be obliged to protect its interest in court, which could be a very expensive undertaking.
CONCLUSIONS AND RECOMMENDATIONS

I. Conclusions

Establishing financial responsibility under the proposed minimum federal requirements is likely to cause difficulties for many UST owners and operators. While several mechanisms are potentially available for this purpose, insurance is evidently the one that has the greatest applicability. However, a significant number of tank owners are currently unable to obtain insurance because they cannot afford it, are not eligible for it, or do not meet the underwriting criteria set by a very limited UST insurance market. There are no obvious panaceas to resolve the difficulties faced by these groups.

In enacting H 1022, Virginia is to be applauded, perhaps, for moving quickly to address the problem. Until the new regulations are developed, the precise manner in which H 1022 is to be implemented remains unknown. However, an examination of the language of the law itself reveals a number of potential difficulties. Furthermore, it is not clear whether the law will succeed in attaining one of its principal objectives, that of making financial responsibility both technically and economically achievable for most owners and operators of USTs in the Commonwealth.

II. Recommendations for Further Research

Additional research is needed in support of the Virginia Water Control Board's rule-making under HB 1022, and in support of legislative amendments. Topics worthy of further study include: the availability of insurance for different classes of tank owners; the feasibility of establishing risk retention pools; the impacts on different classes of tank owners of the costs of demonstrating financial responsibility; and the availability of financing for tank upgrading.
GLOSSARY
RCRA Financial Responsibility Mechanisms — as defined in PL 98-616, any of the following which meet the per-occurrence and aggregate coverage requirements established by EPA in its proposed regulations 40 CFR Parts 280 and 281.

Financial Test of Self-Insurance — An instrument (defined by the EPA) by which a firm demonstrates that it is capable of meeting its financial assurance obligations (as set out in RCRA subtitle I) through its own financial capacities.

Guarantee — A promise by one party (the guarantor) to pay certain debts or perform certain duties of another party (the principal) in the event that the principal fails to satisfy those debts or duties.

Indemnity Contract — A two-party contractual mechanism whereby one party can obtain protection from another party against future losses or harm.

Letter of Credit — A financial instrument through which a financial institution (the insurer) undertakes to meet a monetary obligation of its customer (the account party) if the latter fails to do so.

Risk Retention Groups — A form of insurance managed by the group or association establishing the risk retention group, the purpose of which is to transfer the individual risks of group members to a larger “risk pool.”

Surety Bond — A financial instrument guaranteeing that if certain payments required of the purchaser of the bond are not made, the provider of the bond (the surety) will undertake these payments in accordance with any requirements applicable to bond.


Virginia Water Control Board. 1986. Pollution Response Program (PReP) Reports.
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- It studies the state’s water and related land use problems, including their ecological, political, economic, institutional, legal, and social implications.
- It sponsors, coordinates, and administers research investigations of these problems.
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